AGRINEWS

September 6, 1976

FOR IMMEDIATE RELEASE

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THIS WEEK

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Co-operative Vegetable Trials . . . . .

"Farm Machinery Costs" Publication . . . . .

Dye It Naturally . . . . .

Beekeeping In Alberta . . . . .

SHOUT
SHARE
IT

FOR IMMEDIATE RELEASE Correction - Don't spelled in this article. It should be spelled GRAY not

HOME ECONOMIST NAMED TO HALL OF FAME

It is our job as home economists to teach families to take control of their own destinies

This was the theme of Norma Jean Grey's acceptance speech when she was inducted into the Olds College Alumni Hall of Fame. Mrs. Grey is Alberta Agriculture's regional home economist at Brooks.

Norma Jean Grey

The honor was bestowed upon her in recognition of her outstanding contributions as a home economist, extension educator, 4-H club supervisor, administrator, community worker and a strong supporter of the Olds College. Three years ago Mrs. Grey was named Citizen of the Year by the Brooks Chamber of Commerce in recognition of her dedication to the welfare of her community.

In her speech Mrs. Grey said that during her 32 years of service, she had seen many changes in Alberta Agriculture's extension service. She has seen it change from an answering service makers and as an organization for preparing demonstrations for women's groups and 4-H clubs to a service which envelopes the whole family. A service which works hand in hand with agricultura extension, marketing, social development and other government departments and agencies.

Mrs. Grey believes the basic duty of home economists today is to help families keep informed on current trends and to urge them to take part in local and national decisions. In essence to teach them the skills they need to become effective citizens.

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Home Economist Named To Hall Of Fame (cont'd)

"We must," she says, "explore new ways of teaching the art of decision making. And it is our job to devise strong innovative programs and to find ways of presenting repetitive information in an exciting manner."

According to Mrs. Grey, a survey conducted by the University of Kentucky in the U. S. A. shows that money worries are now the main cause of stress in many families. It says 54 per cent of families in the United States fight over money and that family financial decisions are seldom rational.

Other findings show that American families are hearing the message on energy conservation but not responding with changed behavior; that what were once goals are now considered to be rights; that less than half of America's families are the traditional first marriage nuclear family; that people are looking to employers, unions and governments for security instead of to themselves; that there is a growing skepticism about the integrity of established institutions and an uneasiness about government; that the women's movement is having a profound impact on family life and that a third of the American population cannot handle its everyday money matters.

"It seems," Mrs. Grey says, "that Canadians and Albertans are not very different from the Americans in most of these attitudes. I feel, therefore, that it is the duty of home economists to help families to acquire management skills and new attitudes. They need to shake the psychology of entitlement, use effective financial planning and take control of their own lives. Our challenge for the future is to get across the idea that family financial and resource responsibility is essential to a healthy economy."

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CHANGES IN LIVESTOCK BRAND INSPECTION ACT

Alberta's minister of agriculture, Marvin Moore, says the changes that were made to the Livestock Brand Inspection Act in late 1975 will be implemented within the next few month

Following are the four major areas in which livestock producers and dealers will be affected.

First, it is now the responsibility of the livestock owner or shipper to originate the livestock manifest prior to the animals leaving the farm or feedlot. The manifest is a document required to be used to describe livestock while in transit. Previously it was the responsibility of the trucker to originate the manifest.

All farmers, ranchers and feedlot operators are responsible for the section of the manifest described as 'owner', 'consigned to' and 'livestock fully described'. Hence, they should keep a manifest book in their possession.

After the livestock have been loaded, the trucker signs the manifest and indicates h trucking charges. The owner, or someone acting on his behalf, signs as 'shipper'. The original an two copies go with the trucker and accompany the livestock to their destinations.

The original copy belongs to the trucker and the green and cardboard copies remai with the livestock for inspection purposes. The pink copy belongs to the livestock owner and sh remain in the manifest book. Each person who receives a copy of a livestock manifest is require retain it for at least two years.

The second change in the act requires livestock producers to produce a bill of sale when selling livestock carrying brands that are not their own. For this reason livestock produce and dealers are urged to obtain proper bills of sale when purchasing livestock either through pu

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ges In Livestock Brand Inspection Act (cont'd)

ets or by a private transaction. If livestock owners co-operate, it will substantially reduce the er of instances where brand inspectors have to hold an animal or the proceeds of sale, pending mination of its rightful owner.

The third change concerns livestock producers selling livestock that are not branded with eller's registered brand or are carrying the seller's brand which has not yet 'peeled'. In this case are responsible for ensuring that the brand on which the last transaction was recorded is plainly e to an inspector at the time of inspection, and they must present a bill of sale as proof of rship.

The fourth significant change concerns purebred livestock. They are no longer exempt brand inspection, except when a purebred breeder sells his own livestock on his own premises. ther purebred livestock that are sold will be inspected unless an exemption is granted by the visor of Alberta Agriculture's regulatory services.

Whether or not an exemption is granted will depend upon whether the sale consists lly registered cattle or whether it includes recorded and/or commercial animals. During the last years a number of people conducting purebred sales have requested brand inspection because pedites the movement of cattle for out-of-province buyers.

"These changes in the Livestock Brand Inspection Act," Mr. Moore says, "have been made e interest of livestock producers."

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ALTERNATIVES FOR HARVESTING DAMP GRAIN

In a wet harvesting season a farmer has three alternatives that he can use to help h get his crop off. He can dry the grain with a grain dryer, he can store it damp in a silo or he can pr it with an organic acid.

"If he intends to use the grain only as feed, he will probably find that he is further a and financially better off, to store it in a silo or to preserve it with acid," says Bob Nelson, Albert Agriculture's regional plant industry supervisor at Red Deer, who has done a considerable amoun research into harvesting damp grain.

Silo Storage

Grain can be stored in any type of silo when its moisture content is between 30 and per cent. Below 25 per cent, the grain will not pack properly and above 40 per cent it is too 'mu to pack.

Grain that is stored in a silo should be treated like silage from the point of view of s It must be properly packed to exclude the air as rapidly as possible and then covered with pl sheeting to keep the air and moisture out.

Grain packs best and keeps best when it is rolled or ground with a hammer or burr before being put into the silo.However, to prevent the grain from 'gumming up' the rollers on a mill, it will be necessary to install scrapers at a sixth of an inch from the rollers.. In the case of a hammer or burr mill, the dust collectors will have to be removed to prevent them from clogging

Ideally, pit and bunker silos should be lined with concrete to keep the soil moistur but heavy plastic can be used in an emergency. To minimize spoilage, the silo should be design that at least three inches of feed will be taken off across the face of the pit every day. Once the been uncovered, it cannot be reseated because the grain will spoil. There is no set amount of ma that must be removed from a tower or glass-lined silo each day.

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natives For Harvesting Damp Grain (cont'd)

Preservation

Grain that is going to be treated with an organic acid should have a moisture content per cent or less when harvested. A higher moisture level would make the chemical too expensive e.

For best results the acid should be applied with a special applicator. These applicators a metered acid flow and many have an automatic auger shut-off mechanism in case the acid stops ng for some reason. They treat the grain as it is augered into the bin and mix the acid and the in the auger to ensure a uniform application. They run on 12-volt batteries and cost $400. They also be rented.

The applicators will treat up to 25 tons of grain per hour. The cost of treating a bushel of at 18 per cent moisture is about 11¢ . At 22 per cent moisture it is about 17¢ . The treated grain be safely stored for up to a year.

In an emergency situation the main advantage of preserving grain with an organic acid is bably the fact that the grain does not have to be stored in the absence of air. It can be stored in a den, steel or concrete bin, on a barn floor, in a shed, in a silo, etc. However, wooden bins and bins dirt floors should be lined with plastic sheeting to prevent moisture from seeping into the grain. el bins should be either lined with plastic or painted with an epoxy paint (available from ernational Paints Canada Ltd) to prevent corrosion. Concrete structures should also be lined or nted with an epoxy paint to prevent them from breaking down.

Alternatives For Harvesting Damp Grain (cont'd)

Acid treated grain can even be stored in piles in the field, providing the piles are protect on the top and bottom with plastic sheeting. However, grain stored in this manner must be used befc April of the following year. After this date condensation and heating will take place under the plastic

Another advantage of using an organic acid is that the grain, unlike that which has been ensiled, can be taken out of storage, ground-up, and then put back into storage.

Organic acids will not harm livestock at the prescribed application rates. In fact, cattle produce similar acids naturally in their rumens. It is important to remember, however, that acid trea grain cannot be sold commercially, nor can it be used for seed. The acid destroys the germinatior characteristics of the grain.

"Basically," says Mr. Nelson, "organic acids prevent grain spoilage by eliminating the micro-organisms that cause spoilage. Propionic acid will kill or arrest the growth of molds while acet acid and benzoic acid will stop yeasts and bacteria from developing. Mixtures of these acids are avail commercially under the names of "Grain Treet" and "Chemstore".

Organic acids and applicators can be obtained from Federated Cooperatives Ltd. and Cargill Grain Company Ltd. (National Grain). The acid is also available from Celanese Canada Ltd., P.O. Box 99, Edmonton (477-0546).

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WARBLE NUMBERS UP

Did you know that the number of warble infested cattle in Alberta was up last year compared with the previous year?

Although government inspections at provincial auction markets last spring showed tha only 5 per cent of the cattle moving through these markets had warbles, a survey done on slaughtere animals during the same period showed that 25 to 30 per cent of them were infested. This is an incre of 5 to 10 per cent over 1973.

A possible explanation for the discrepancy in these two sets of figures is that cattle designated for slaughter in the fall are not being treated. The result, of course, is thousands of dollar worth of losses to the sellers because the packers always bid low on warble infested cattle to compensate for trim and hide losses.

It is true that a 5 per cent infestation rate on live cattle is about the same as in 1975, but it should be realized that the infestation rate at individual locations in the province varies all the way from less than one per cent to 19 per cent. Although there is no clear cut reason for this variati it seems that some areas have accepted warble control better than others. Some farmers seem to be using the present depressed cattle prices as an excuse for not treating. However, it would seem more logical when prices are low to try to get every cent back from the initial investment in feed and labo This can only be done by making sure that the cattle gain at the highest possible rate and fetch the best possible price.

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e Numbers Up (cont'd)

The following table shows the number of cattle inspected at auction markets in six regions province last spring, the number of cattle found to be infested with warbles and the percentage estations.

Region	Total Cattle	Number Infested	Per cent Infested
thbridge	62,451	1,128	1.81
lgary	73,006	2,314	3.17
d Deer	83,128	4,197	5.05
rmilion	24,285	2,016	8.30
lmonton	87,016	6,680	7.68
ace River	8,952	585	6.55
Total	338,838	16,920	4.99

Stettler, one of three areas in the province that has been exempt from the provincial le control program, has now entered it. The M. D. of Peace River is in the process of entering, h leaves only the County of Newell. The latter is still exempt from the regulations under the rta Agricultural Pest Control Act.

With such a large percentage of slaughtered cattle infested with warbles, and 19 per cent of cattle inspected at some auction markets being infested, it is imperative that an intensive farm le control program be carried out in Alberta this fall, says Michael Dolinski, entomologist and control specialist with Alberta Agriculture.

• The time to treat is September, October and November. With the exception of Co-Ral, emics cannot be used in December, January or February.

• The systemics which are approved for use on beef cattle and non-milking dairy cattle hing over 300 pounds are: Ruelene, Neguvon, Epco Tribhlorfon, Tiguvon and Co-Ral.

Warble Numbers Up (cont'd)

- Pregnant cows and cows suckling calves and the calves can be treated, providing the calves weigh over 300 pounds.
- Milking dairy cows should not be treated until next spring and then only with Roten
- Systemics should not be used on cattle under stress (castration, dehorning, etc.).
- Cattle which have been treated with a systemic should be watched closely for 24 hou after treatment. This is the period that side effects are likely to show up.
- Cattle must be given water and allowed to exercise after treatment.

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FOR IMMEDIATE RELEASE

HAIL SUPPRESSION RESULTS

A report issued by the Alberta Weather Modification Board indicates that hail suppress by cloud seeding reduced the amount of hail that fell during the summer in central Alberta.

The reports says many of the small potential hail storms that were seeded dissipated w little or no hail falling. While some crops sustained 100 per cent damage from the large storms that extended from Calgary to Red Deer in early July, many farmers felt that cloud seeding was respons for the relatively small area where damage occurred compared with the intensity and size of the sto

This season represents the third of a five-year experimental hail suppression program b carried out by the Alberta Weather Modification Board in central Alberta. The chairman of the boa Gordon Sterling, says seeding techniques were slightly changed this year on the basis of informatio obtained from radar and other sources during the first two years of the program.

The main change entailed dropping the flares into the top of the shelf (base) cloud of producing clouds rather than into the growing cloud turrets of the storm as was done in previous y The idea here is to get the silver iodide into the cloud turrets earlier in their development.

In the case of imbedded clouds, and in the case of some high clouds, the seeding is do below the shelf cloud by burning the silver iodide flare on the trailing edge of the aircraft's wings a flies in the perifery of the updraft of the clouds.

"Our pilots and our meteorologists, when flying, have observed a change in the clo structure on numerous occasions shortly after the clouds have been seeded," Mr. Sterling says. Apparently, this change is particularly noticeable during the top seeding of clouds in the smaller st

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ɔression Results (cont'd)

ɡ to Mr. Sterling, the weather modification board has developed an experiment to determine ɔr not there is a visual effect following cloud seeding from below the clouds. The same na as noted above may also be true for base seeded clouds.

The Research Council of Alberta's (RCA) atmospheric sciences division has done a ble amount of research on data collected during the first two years of the weather ːion program. Studies on hailswath length, although not statistically significant, showed that ıs are shorter on hail seeding days than on non-hail seeding days.

RCA has also studied the impact energy of seeded versus non-seeded storms. The scientists tle difference in the two on the basis of the 1974 data, but the 1975 data showed more impact ı non-seeded storms than in seeded storms.

Although RCA is not prepared to draw any conclusions at this time from the studies, ɜsent trend continues, it will probably be possible to measure the differences between seeded seeded storms by the end of the five-year program or shortly afterwards.

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FOR IMMEDIATE RELEASE

ALBERTA FORAGE SITUATION

Alberta's total tonnage of forage and roughage products will probably be adequate meet this winter's livestock requirements, but the quality of this year's hay crop leaves much to desired.

Don Macyk, market analyst with Alberta Agriculture, believes that only about a thi of the hay will be of good quality, and that forage supplies may be short in isolated areas of the province where rain or hail has ruined the hay crops. However, he says that for the most part recent moisture has resulted in good grass stands for fall pastures and improved the possibility o a good late hay crop, providing there are no severe frosts before mid-September.

A considerable quantity of straw will almost certainly be put up this fall as well as greenfeed, especially in central and south-central Alberta. The poorer quality hay that will be us for cow maintenance rations this winter will probably have to be supplemented with grain and processed alfalfa.

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FALL MANAGEMENT OF ALFALFA

The type of management an alfalfa field receives in the fall can make the difference between a poor stand and a good stand the following year.

According to Larry Gareau, forage specialist with Alberta Agriculture, damage to an alfalfa crop actually occurs in the fall even though the plants may die during the winter months. "It is better," he says, "not to cut or graze alfalfa fields after the end of August. However, if a shortage of feed makes it necessary to harvest another crop, cutting should not be done until after the first killing frost."

After a killing frost there will be very little regrowth to deplete the food reserves in the root system, which are needed to carry the plants through the winter. If, on the other hand, the crop is cut now it will probably have only two or three weeks for regrowth."Two or three weeks is long enough to deplete the food reserves in the roots system, but not long enough to allow them to build up again. The plants then go into the winter with low food reserves and are much more susceptible to winter killing than well nourished plants,"Mr. Gareau explains.

Fall growth also provides winter insulation for the plants. A foot of top growth, for example, keeps the top inch of soil at least five degree warmer than it would be without the top growth. By holding the snow, it keeps the plant crowns at -2^{o} to -3^{o} C. regardless of how low the temperature falls. This insulation factor is extremely important because a temperature of -8^{o} to -10^{o} C. will kill alfalfa plants.

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FOR IMMEDIATE RELEASE

CO-OPERATIVE VEGETABLE TRIALS

A series of co-operative vegetable trials are being conducted throughout Alberta to de which cultivars (varieties) perform best in the various regions of the province.

These trials have been going on for several years, and are being sponsored by the Albe cultural Research Center at Brooks, the University of Alberta and the regional colleges.

This year new trial plots have been established in the Peace River valley where the ma the commercial vegetable production for the area is concentrated. Most of the vegetables norma in the valley are included in the trials.

Another new cultivar trial is being carried out with pickling cucumbers on a farm nor Edmonton. The goal here is to find out more about the growth habits of cucumbers in this part province. Cucumbers are a very desirable market garden crop for which there is always a good d

A trial has also been established this year at a number of test sites and in vegetable gr fields in various parts of the province to evaluate the results obtained from growing warm weatl tables with a plastic mulch as opposed to growing them in the conventional manner. The 1½ mi plastic was layed down with a plastic mulch-laying machine.

The plastic mulch will conserve moisture, prevent weed growth and increase soil tem resulting in faster vegetable growth and an earlier harvest.

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FOR IMMEDIATE RELEASE

"FARM MACHINERY COSTS" PUBLICATION

A new publication on farm machinery costs is now available from Alberta Agricu It covers hourly cost data for cultural, harvesting, haying, feeding, irrigating and other common farming operations.

The publication is divided into three sections, each of which emphasizes a partic aspect:

Section 1 describes the basic assumptions associated with farm machinery cost analysis, and states the concepts of fixed and variable cost components.

Section 2 contains a series of cost schedules for quick reference suitable for most situations. Retail price data (as of January, 1976) and hourly cost data for each machine listed a assumed to be generally applicable to Alberta conditions.

Section 3 is designed to show some important cost applications for specific mac operations, efficiencies, and performance. It also contains tables for determining hourly costs machines with varying annual use and different years of ownership.

The publication is intended to provide farm operators, research workers, extension personnel, and the agribusiness sector with the most recent data and information on operating a ownership costs of farm machinery commonly used in Western Canada.

Copies of the publication, entitled "Farm Machinery Costs", can be obtained from publications office, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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FOR IMMEDIATE RELEASE

DYE IT NATURALLY

by Betty Birch
Alberta Agriculture's District Home Economist
at Stettler

Natural dyeing can be an exciting pastime and a good outlet for your creativity. Many natural materials provide an exciting array of beautiful colors.

Natural fibres such as cotton, linen, silk and wool can all be dyed for use in embroider weaving, rug-making and for wall hangings, and a dye can be obtained from almost any natural ma

Golden-rods, dandelions, marigolds, asters, poplar leaves, berries, carrot tops, tomat leaves, saskatoons, chokecherries, rhubarb roots and onion skins all provide interesting colors. Unli chemical dyes, where the colors may clash, the colors obtained from natural materials blend togeth In Latin American countries insects and shell-fish are also used for dyes.

Roots and barks are richest in color when the sap is rising; flowers when they are in fu bloom and berries when they are fully ripe. Different shades can be obtained, depending upon the time of year, the soil and the climatic conditions.

When you have collected your dye material, it should be cut or chopped up to release the color. Then cover it with water in a large pan. Old unchipped enamel or stainless steel pans are best. Aluminum dissolves and affects the dye as do chips of enamel. Roots and bark will release more color if soaked overnight.

Simmer the dye material for 15 to 30 minutes. With some materials it may take up to two hours to extract all the color. Cool the solution and strain the liquid off.

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.t Naturally (cont'd)

Some dyes color well on their own, but most require a chemical substance called a dant to help fasten the color to the fibre. Common mordants are alum, cream of tartar, vinegar, nous chloride (tin) and ferrous sulphate (iron). You can get these at the drug store. As well as ing the dye to take, a mordant can also affect the color. Onion skins, for example, give an orange- ow dye with alum, bright yellow with stannous chloride and dark brown with ferrous sulphate.

A good method of dyeing is to use 2-quart glass sealers and heat them in the oven. I . are using different mordants to get different colors, you can make up several jars of dye. Always el the jars so that you can keep track of your results, especially if you are experimenting.

To dye wool, you can pre-treat it with the mordant, or add the mordant to the dye e 1/2 teaspoon of mordant and 1/2 teaspoon of cream of tartar in boiling water. Add this to a pan cold water (for pre-treating) or directly to the dye.

Dampen the wool about half an hour before dyeing, then put it in the solution. Place e sealers in a cold oven and turn the oven on to 200° F. Hold it there for about two hours. Then ow the wool to cool in the dyebatch.

Rinse the wool several times in lukewarm water until the water is clear, and then dry in open air, but not in direct sunlight. Although everything you try may not turn out, most of ur results will be really satisfying.

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FOR IMMEDIATE RELEASE

BEEKEEPING IN ALBERTA

Who may keep bees in Alberta and where?

According to Alberta Agriculture's supervisor of apiculture, Dr. Ulf Soehngen, excep for the prohibitions by some towns and cities on keeping honeybees within city limits, there is no restriction on the locations where bees may be kept, providing they do not interfere with the activities of others.

In essence, beekeeping is open to anyone who fulfills his obligations under the Alberta Bee Act. The intent of this act is mainly to provide a method of controlling American Foulbrood, the most destructive honeybee disease in the province. Dr. Soehngen says two of its provisions are especially important to beekeepers in this province.

The first is the provision which states that all apiary locations must be registered with the supervisor of apiculture. Registration is an annual procedure which must be completed by May of the current year. It is designed to facilitate the inspection by Alberta Agriculture's apiary inspec of colonies for American foulbrood. There is no charge for this service.

The second provision states that all colonies, used hives and used hive parts must be ir a permit for sale issued before they are sold or given away. The intent of this provision is to prever the transfer of contaminated equipment to an unwary buyer.

It is the responsibility of the buyer as well as the seller to ensure that a sales permit, is by the supervisor of apiculture or one of his inspectors, accompanies all used hives and hive parts.

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keeping in Alberta (cont'd)

The purchase of one or several used hives from an established beekeeper is often the est way to start in the beekeeping business. "During the past year," says Dr. Soehngen, "the price five-story colony (two brood chambers and three full-depth supers) has varied between $50 and r $100, depending upon the condition of the equipment (including combs), whether it contained s and/or honey and, of course, upon the demand.

Dr. Soehngen feels that beginner beekeepers often make the mistake of taking on more n they can handle. "Success in beekeeping," he says, "as is the case with many other pursuits, ends to a great extent upon hard work and experience in addition to a knowledge of bee behavior l environmental conditions. "For this reason it is usually best to start with only a few colonies and gradually build up to the desired size of operation as a person gains in confidence and colony nagement expertise. In beekeeping 'make haste slowly' is sound advice.

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MORE MUSHROOMS IN ALBERTA

by Susan Kitchen
Marketing Officer
Alberta Agriculture

Susan Kitchen, Alberta Agriculture's marketing officer in Calgary, inspecting tray-grown mushrooms at Great Plains Mushrooms Ltd. in Airdrie

John Rathje, owner and manager of Great Plains Mushrooms Ltd., started production at Airdrie plant in mid-June 1975. Already he is producing 15,000 pounds of mushrooms a week, eve and he has plans to double this volume in his second year of operation.

John also owns a mushroom plant at Lumsden, Saskatchewan, which supplies Regina southern Saskatchewan. Proximity to a good market and lack of competition prompted him to bui another plant at Airdrie. It has been a profitable move.

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Mushrooms in Alberta (cont'd)

ınt and Preparation

John designed the 35,000 foot facility himself. It is a tray-type operation as opposed to a bed John claims that a tray plant facilitates the incorporation of further automated processes.

His plant is completely automated, except for picking. The impressive tray-line machine, the its kind in Western Canada and the second in Canada, was custom-made in France for the Airdrie t mixes and prepares the beds in the 4' x 6' x 6" trays in one hour, a job which formerly took five l day. Seed is added to the beds, via the machine, and, when ready, the peat or casing is applied. At the tray-line runs three days a week, but it can handle double this workload.

About 11 weeks elapse from the time the compost is first mixed and the last break (crop) of ɔoms. The compost made of 90 per cent straw (used bedding from local horse barns), brewer's ıitrogen (21-0-0) and some calcium sulphate, ferments in a covered shed for a week. Wooden trays ɐd with the compost and kept in the cook-out room for seven days at 60°C to complete fermen- Nitrogen and soluble carbohydrates are converted by microbes to protein, which is the main source ients for the mushrooms.

g With Spores

The trays are passed through the machine again and the mushroom spores are added and mixed e beds. The trays are cooled and stored in a virus free room at about 24° - 25°C, with 100 per cent ity. The spores begin to produce thin thread-like tubes called spawn or mycelium which rapidly s throughout the bed. The mix appears almost white in about 14 days. Then, a two inch layer of applied and the trays are moved to the growing rooms.

In the growing rooms, carbon dioxide is removed, the temperature lowered to about 15°C, the ity lowered to 82 per cent and fresh air is circulated through an extensive air-conditioning system. changes in environment stop the vegetable growth stage of the mycelium and initiate the repro- e or pinhead stage.

It takes 10 days from the time the peat or casing layer is added to when the first pinheads . The first break of mushrooms is mature enough to pick after seven days. The first and second yield up to one pound per square foot. The beds regenerate five times with new mushrooms ing every seven to 10 days. However, yields decrease with each successive break as the protein con-

Because mushrooms are fungi and don't produce chlorophyll, no light is needed for th The rooms are artificially lighted only when the picking and watering is done. Sunlight dries and dis mushrooms.

The mushrooms are selectively picked by hand before the cap under-surface separates fro stem. Size has no bearing on maturity. Pickers average 30 pounds per hour and are paid on an incen wage plan.

Distribution and Marketing

The mushrooms are put directly from the beds into 10-pound stackable boxes, and then s at 1°C before shipping. The Great Plains Mushroom boxes are custom-designed and are shaped so t they stack without crushing the mushrooms. Vents along the boxes allow cold air to circulate easily 10-pound size is also a first! Most growers ship to the wholesalers in 2½-pound boxes. "At first whc didn't want them", John says, " now they are more than pleased with my 10-pound boxes."

The boxes are packed four to a case and trucked into Calgary daily. John sells only to wh outlets in Calgary. From there it's up to the wholesalers to get the mushrooms out on the retail she promptly as possible, so that they retain their quality freshness.

John presently receives 85¢ a pound for his mushrooms, which retail for about $1.29 per Price is more or less set by B.C. Fraser Valley Mushroom Growers but, because of transport costs, E grown mushrooms wholesale at 90¢ a pound in Alberta. It is a production oriented market, and as points out, demand far exceeds supply. "If I could double my production", he says, "I could imm double my sales. My advertising costs in the first year were only $28!"

In Europe the per capita consumption of mushrooms averages 5 pounds per year. In the Valley, mushroom consumption is up to 6 pounds. In Alberta it's only a third of that. John hopes with more consumer information about mushrooms - and more mushrooms - Alberta consumption increase. He looks forward to the day when he produces so many mushrooms that he can actually p mote and sell them. "When I finish growing mushrooms", he says, "everybody in Alberta will have guilty conscience if they don't have mushrooms with every steak they eat!"

September 13, 1976

FOR IMMEDIATE RELEASE

PROCESSED ALFALFA SITUATION

The price for processed alfalfa products is expected to drop several dollars per ton bef the export demand establishes itself this fall.

Alberta Agriculture's market analyst,Don Macyk, believes that the current quiet mark for processed alfalfa products and for other livestock feeds is probably caused by the response c livestock feeders to lower feeding margins. "The mid-summer run-up in the prices of almost all feec compared with falling prices in the overall livestock sector, has brought about a decline in livestock feeding intentions, particularly in North America," he says. However, Mr. Macyk is optimistic th some softening from summer price highs may get the demand back on track.

Although the export demand for alfalfa products is still vague, it is expected to pick u this fall. "However, the improved world availability of feed grains for export trade will probably m that export buyers will take close aim for the best bargains in the market place," Mr. Macyk says. "Any commodity that moves out of line will likely be substituted." On the other hand,he expects current protein prices to prevail for the majority of trade during the next few months, providing th are no major changes in the expected U. S. soybean harvest.

At the present time American processed alfalfa product availability appears good with total production of 1.2 million tons likely. U. S. storage stocks of both dehydrated and sun-cur alfalfa are higher than they were a year ago, but the monthly disappearance of this feed has also increased.

Alberta Situation

Alberta alfalfa processors carried 7,000 tons of alfalfa pellets and cubes into the ne crop year. They were mainly sun-cured pellets and cubes because supplies of dehydrated produc were almost zero at the start of the new crop year.

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Alfalfa Situation (cont'd)

Mr. Macyk says a 7,000-ton carryover is about 6 per cent of production and should as a low carryover from the industry's point of view. Production in the first two months p year totalled 46,000 tons of which 32,500 tons were dehydrated pellets and 13,500 tons cured pellets and cubes. "This level of production," Mr. Macyk says, "must be viewed a ting when compared with earlier first-cut expectations of 58,000 to 60,000 tons." The low n resulted from a combination of too dry and too wet conditions, plus a reduced acreage.

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September 13, 1976

FOR IMMEDIATE RELEASE

A GUIDE TO MACHINERY CUSTOM CHARGES

The Alberta agricultural monitoring system, run jointly by Unifarm and Alberta Agriculture, is now being used to survey custom charges for seasonal field operations.

During August 35 monitors, located throughout the province, collected detailed data on custom rates. In each survey area one or more custom operators, almost all part-time, provided t following details. The figures are commercial custom rates, not 'good neighbour' rates. They include provision of tractor, implement, fuel, lubrication, and operator.

Hourly rates are often quoted to cover difficult conditions and to allow for quality wor They must be considered in conjunction with machine width, capacity and rate of work.

Swathing

$1.75 to $3 per acre. Sometimes a 50¢ to $1 per acre surcharge is asked for heavy, lodg irrigated or rapeseed crops. On an hourly basis rates vary from $5 to $16 per hour

Combining

$7 to $10 per acre, depending upon swath width, yield, lodging, irrigated or non-irrigate crop, late season or wet field conditions. On an hourly basis rates vary from $25 to $50 per hour, depending upon capacity and cylinder size.

Grain Handling & Trucking (highly variable)

$10 to $15 per hour for truck and driver when hauling from field to farm storage, depending upon number of combines serviced. 1/3¢ to 1/2¢ per bushel-mile or a straigl 5¢ to 15¢ per bushel, depending upon maximum mileage from farm to elevator.

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A Guide To Machinery Custom Charges (cont'd)

Grain Drying

14¢ to 20¢ per bushel for 4 to 5 per cent moisture extraction. The higher rate is sometimes charged for wheat and usually charged for smaller batch driers. The hourly rate is $30 per hour.

Mold Board Plowing

$3 to $7 per acre, depending upon soil type. The lower end of the range is usually used for the larger tractor plow units. On an hourly basis the rates vary from $22 to $50 per hour, depending upon plow width and tractor horsepower.

Cultivating

$1.50 to $3 per acre. The lower rate is used for shallow tillage and the higher rate for deeper tillage or harrow attachment.

Custom charges often reflect supply and demand for the service. Rates at the lower end of the ranges quoted may indicate a willingness to spread ownership costs over more acres or more hours of work, thus reducing the total cost per unit of work done. Rates at the lower end of the range may also apply to good working conditions, such as large, level, unobstructed fields; weed free crops and long term or large contract jobs, all permitting average or above average rate of work or more easily planned operations.

Charges at the higher end of the range may indicate a shortage of custom operators. They may also allow for poor weather; late season; small uneven contoured or irregular shaped fields; stony soil or other factors which slow work rate or increase repair and 'down-time' costs.

Additional guides which Alberta farmers can use to set custom rates include the CANFARM computerized 'Buy versus Hire' program which is available through district agriculturists; the new publication "Farm Machinery Costs, 1976" and "Farm Machinery Costs as a Quick Guide to Custom Rates, May 1976". The publications are available from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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September 13, 1976

FOR IMMEDIATE RELEASE

INSECT TRAPS FOR PREDICTING POTENTIAL INFESTATIONS

How effective are pheromone or sex attractant traps compared with blacklight insect traps monitoring the number and distribution of cutworm moths?

Personnel from the entomology section of Alberta Agriculture's plant industry laboratory working with scientists at the federal research station at Lethbridge who developed the pheromone t in an attempt to come up with an answer to this question.

Both types of traps are designed to help prevent cutworm damage by providing a method predicting infestations so that Alberta farmers can be given advance warning of a potential proble

The pheromone traps are baited with synthetic chemicals called sex attractants, which a specific for a particular species of moth. Since each attractant draws only one species of moth, farm and others who are not trained in the identification of moths need only to count the number captur be able to predict the type and seriousness of a potential infestation.

Work on sex attractant chemicals was started at Lethbridge in 1969. To date attractants f species of cutworm moths have been developed. The odor of each attractant has to closely resemble odor produced by the female moths of that species to attract male moths for mating.

Dispensing the attractants in field traps requires great precision. The scientists at Lethbric have found that the male moths are not attracted if the concentration is higher than the concentrati produced by the female moths. Apparently one ounce of attractant is sufficient to bait about 6,00C for one season. Such a minute amount of chemical is not sufficient to cause environmental pollutio

Future prospects for the use of sex attractants could include catching such a large numbe particular species of insect that those remaining would do little damage. Another possibility would l capture the insects, sterilize them and release them or to confuse the species by 'flooding' insects wi their own attractant.

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aps for Predicting Potential Infestations (cont'd)

The blacklight insect traps, being used on a province-wide survey basis by Alberta Agriculture's gy section, attract night-fly moths by an ultra-violet light. The moths are then drawn into the fan and collected in a killing jar at the base of the trap.

The Alberta entomologists are also working with scientists at the National Research Council in n to evaluate the effectiveness of pheromone traps versus blacklight insect traps in detecting the of berth armyworm moths. These field tests are being carried out just north of Edmonton, at id at Strathmore.

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September 13, 1976

FOR IMMEDIATE RELEASE

SHEEP TEST STATION SALE RESULTS

The total value of 43 lambs sold at the second annual sheep test station sale at Inni almost $10,000 —— a considerable increase over last year's total value. The buyers came from as away as the Peace River, Athabasca, Lethbridge, Foremost and Twin Butte areas.

Gordon Kure of Innisfail shared the Maple Leaf Mills Trophy for the top indexing l at the test station with Clarence Jones of DeWinton and he topped the sale with a Suffolk ram l The latter sold to R. J. Foster of Gibbons for $450. Mrs. P. Newman of Blackie sold a Hamshire lamb to Tom Reed of South Edmonton for $410, the highest price paid for that breed.

Tom Seaborn of Rocky Mountain House won the award for the top indexing pen c lambs,and Mr. Kure won the award for the animal with the best loin eye area. Scottie Stewart o Bittern Lake won the sheep dog trial award, donated by the Phil Rock family who are prominer sheep breeders in the Drumheller area.

The sale was an unqualified success from the point of view of both the organizers a the contributors. The display tables, manned by personnel from the Alberta Sheep and Wool Commission, Alberta Agriculture and private companies related to the sheep industry, and th individual handicraft displays all elicited a great deal of interest from the 250 people who atten the sale.

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September 13, 1976

FOR IMMEDIATE RELEASE

FALL APPLICATIONS OF NITROGEN FERTILIZER

An increasing number of farmers are applying their nitrogen fertilizer in the fall to avc the workload pressure in the spring. Also, the fertilizer industry is encouraging this practice becaus their distribution system could not handle all the orders in the spring.

Doug Penney, Alberta Agriculture's soils specialist, says fall fertilizer applications ca give good results if the following recommendations are adhered to.

- Do not apply a nitrogen fertilizer in the fall until after plant growth has ceased. Tl practice will prevent the nitrogen being used by weeds and volunteer grain during the fall.
- Do not apply a nitrogen fertilizer in the fall to land that is subject to flooding or whi remains saturated for several days after the spring run-off.
- Do not apply a nitrogen fertilizer in the fall to soils that are very sandy because the fertilizer may leach below the plant root zone.
- Do not apply a nitrogen fertilizer in the fall if you are planning to use delayed seedi the following spring for weed control.
- Do not apply a nitrogen fertilizer to forage crops until late fall when all growth h ceased. Growth of these crops should not be stimulated before they go into dormancy.

Mr. Penney stresses that the proper use of fertilizers is more important than ever in v of higher fertilizer and crop prices. "These higher prices," he says, "mean that there is more to b lost from the improper or inadequate use of fertilizers and more to be gained from a good fertiliz program." A fertilizer program should be carefully planned and soil testing should be part of tl program.

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Fall Applications Of Nitrogen Fertilizer (cont'd)

October is a good month for taking soil samples because soil temperatures are usually below 10°C. This means that very little change will occur in the nutrient status of the soil between October and next spring.

Anyone who is planning to take soil samples should always do so before applying a fertilizer. Only if the field is sampled before the fertilizer is applied can an accurate nitrogen recommendation be given.

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September 13, 1976

FOR IMMEDIATE RELEASE

RESEARCH UNDERWAY ON USE OF SOLAR ENERGY IN GRAIN DRYING

Scientists and agricultural engineers in 11 American states are doing research into t use of solar energy to dry grain.

According to the release received by Alberta Agriculture, they are following through (earlier tests which indicated that solar heat could supplement, and possibly replace the present higl heat drying techniques that consume fossil fuel. The release says the scientists are particularly anxi to find out how solar heat can be used to overcome poor drying conditions in the late fall and earl winter.

In one study the agricultural engineers will compare drying grain by natural air supple mented by solar heat, drying grain with natural air only and drying grain with natural air plus elect or gas heat.

Research workers at Kansas State University, Manhattan, will explore the use of air inflated fibreglass structures as dual-purpose solar collectors and enclosures for drying and storir grain. Colorado University at Fort Collins is going to design and test a solar collector and heat stor system which may be used for drying grain and for heating water, a livestock building or a farm sh(

A firm in Arizona will develop a computer program to calculate output temperatur from various types of solar collectors under different operating and climatic conditions.

Michigan State University scientists at East Lansing are going to develop and test a m ematical model to simulate bin drying corn with solar heat, while engineers at the University of Missouri in Columbia will be determining drying rates for corn at a range of airflow rates and temp atures common to solar dyring.

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arch Underway on Use of Solar Engergy in Grain Drying (cont'd)

The U.S. Agricultural Research Service (ARS) will evaluate various designs and materials ll as the construction of pilot-scale solar collectors, and explore storing solar heat in an insulated tank and then using that heat to dry rice at night or during periods of no sunshine. The ARS neers will also store solar heat in previously dried grain for use in drying wet grain.

George H. Foster, agricultural engineer, Grain Marketing Research Centre, Agricultural arch Service, U.S. Department of Agriculture, Washington, D.C., is the principal investigator and dinator for all the studies.

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September 13, 1976

FOR IMMEDIATE RELEASE

A CHEMICAL ANALYSIS OF FARM WATER

Andrew Livingstone, engineering technologist with Alberta Agriculture, advises having ical analysis done before using water for domestic purposes from a new well or dugout and on w has an unpleasant taste or odor.

You should have an analysis done, for example, if your laundry is stained or if water f such as taps and showerheads,become incrusted or corroded or if your water tastes of salt or soc Mr. Livingstone recommends having farm water analyzed every year because its quality can char time.

A chemical analysis determines the amount of chemicals and minerals in the water. It method used to determine the hardness of the water, the iron concentration in the water and th of such chemicals as chlorides, sulphates, nitrates and nitrites.

The water sample you take should be a representative one. In most cases this means a water to run from the tap for five minutes and then filling the sample container. You can get a from your local health unit, plumbing inspector or agricultural engineering technologist.

If you have water treatment equipment, you may want to take a 'before' and 'after' s chemical analysis. In this case take the untreated sample from the well or dugout before the wa through the treatment equipment and the treated sample from a household tap.

You can submit your sample to your local health unit, or agricultural engineering tec who will forward it to the appropriate laboratory. By submitting it this way, your local health technologist will receive a copy of the analysis results and be able to help you interpret them.

If you have any problems taking a representative sample, contact your agricultural te through your district agriculturist or district home economist.

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September 13, 1976

FOR IMMEDIATE RELEASE

CYANOGAS AVAILABLE TO BEEKEEPERS THIS FALL

Cyanogas will be available to Alberta beekeepers this fall for gassing their honey bees.

Ulf Soehngen, supervisor of Alberta Agriculture's apiculture branch, reports that the federal government has agreed to grant provisional registration for Cyanogas for use in gassing honey bees.

"The provisional registration", says Dr. Soehngen, "is good for this fall only, but there is a possibility that it could be extended later, subject to the acquisition of additional data."

He stresses that Cyanogas may be used only after all the honey that is to be extracted has been removed from the colonies. Apiculture personnel will collect samples of the extracted honey, and these samples will be analyzed at the provincial laboratory. Any honey containing residues of Cyanogas will be confiscated!

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September 13, 1976

FOR IMMEDIATE RELEASE

HOME VEGETABLE STORAGE

Keeping garden vegetables during the winter months presents a problem in many hom because basements are usually too warm and too dry.

However, with a little ingenuity it is often possible to modify these uncongenial condi by walling off a corner of the basement. All storage rooms should have a thermometer in the cent the room, well above the floor.

Temperature

Temperature is the most important factor in the successful storage of garden prod It can be controlled by using either a mechanical refrigeration system or by using cool outside air. The advantage of the former is that it makes it possible to control the air temperature all year rou while outside air can be used for cooling only during the fall and winter months.

Humidity

A high level of humidity is also important for maintaining high quality stored vegetal You can pour water on the floor of the storage area at regular intervals to keep the humidity at a satisfactory level. You will need to wet the floor more often during the fall than during the winte because refrigeration or ventilation requirements are greatest in the fall. Both mechanical refrigera and cooling by ventilation causes a loss of humidity. The installation of a slotted duckwalk, in ad to keeping your feet dry when you enter your storage room, will help to provide air circulation u the stored produce.

Sanitation

Because decaying vegetables quickly cause molds and bacteria, it is extremely impor to thoroughly clean the storage room and all storage containers with a detergent and disinfect bef

– (cont'd) –

'egetable Storage (cont'd)

w storage season. Keep the storage room well ventilated when it is empty and keep the
ature high. Never put cracked, bruised or decaying vegetables into your storage room.

Although most vegetables require cool, moist storage conditions, some need a warmer
ature because they are easily chilled.

Vegetables requiring warm, dry conditions, include pumpkins and winter squash. These
be put on shelves in a heated basement and placed in such a way that they do not touch each
Before placing them in storage, put them in a dry location for two weeks at a temperature of
3.5° to 29.5° C.

Vegetables requiring cool, dry conditions include dried peas and beans and onions. Dried
d beans can be kept in an outside porch or an unheated room of any kind, However, they should
ed in polyethylene bags (without holes) or in glass jars to keep them dry.

Onions need to be cured for several weeks in a warm, dry, well ventilated location before
into storage. They are ready for storage when their skins 'rustle'. Onions will keep for several
s in an unused room where the temperature does not drop below freezing. Although it is
e to store onions for a short time in a ventilated storage room, it is best to store them in a
e location.

Vegetables requiring cool, moist conditions include beets, carrots, celery, parsnips, turnips,
oes and cabbage. Always make sure they are mature and free of injury and root crops should be
ably dry when put into storage. Since they lose moisture readily when in storage and tend to
, it is a good idea to keep them in perforated polyethylene bags or containers that are covered
a polyethylene sheet. Cabbages should be trimmed and stored in perforated polyehtylene bags.
practice helps them retain their moisture and color.

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Home Vegetable Storage (cont'd)

Potatoes should be stored at a temperature of 4.7° to 10 °C. If the temperature is lower than this they tend to develop a 'sweet' flavor. Since the temperature in the storage room w probably be lower than that recommended for potatoes, it is a good idea to build an insulated bir However, the bin should be vented to allow air to enter.

You can obtain more information on vegetable storage and plans for constructing a s room from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 1E4.

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September 13, 1976

FOR IMMEDIATE RELEASE

DIRECTOR OF MARKET DEVELOPMENT APPOINTED

The appointment of James W. Clarke to the position of director of market development has been announced by Marvin E. Moore, Alberta's minister of agriculture.

Market development functions under the direction of the assistant deputy minister of marketing, J. Harold Hanna. It provides assistance and support to producers, agri-business and the food industry to maximize market opportunities for Alberta agricultural products.

Mr. Clarke was previously director general of the Alberta Export Agency. He is a graduate of the University of Saskatchewan and has broad experience in private enterprise, teaching and government service.

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FOR IMMEDIATE RELEASE

THIS WEEK

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September 20, 1976

FOR IMMEDIATE RELEASE

AGRICULTURAL RESEARCH CONTRIBUTION

Marvin E. Moore, Alberta's minister of agriculture, has approved a 1976 - 77 contribution of $250,000 to the province's Agricultural Research Trust.

Set up in 1966, the trust matches industry and commodity group research funding and provides a limited amount of direct funding to Alberta's universities and research institutions carrying on projects of value to agriculture.

The trust is administered by a board made up of producers, industry representatives and representatives from Alberta Agriculture, the Alberta Research Council and the University of Alberta.

Since the trust's inception 50 companies, including farm organizations, have financed over $3 million of agricultural research on a matching grant arrangement with the government. Most of the research has been aimed at solving practical farm problems.

Mr. Moore indicated his strong support for continued research as an investment in Alberta's agricultural productivity.

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September 20, 1976

FOR IMMEDIATE RELEASE

PLEBISCITE RESULTS ON ALBERTA BEEKEEPERS COMMISSION

Alberta's beekeepers have voted to terminate the operation of the Alberta Beekeepers Commission. The plebiscite was held in response to concerns expressed by some beekeepers regarding the establishment and operation of the commission.

Marvin Moore, minister of agriculture, announced that of the 546 eligible beekeepers that had registered with the Agricultural Products Marketing Council for the purpose of voting, 397 or 72.7 per cent voted to terminate the plan that established the commission.

Mr. Moore stated that the procedure required to wind down the affairs of the commission will be implemented as soon as possible.

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September 20, 1976

FOR IMMEDIATE RELEASE

AGRICULTURE WEEK OCTOBER 4 - 8

Marvin E. Moore, Alberta's minister of agriculture, has designated October 4 to 8 as Agriculture Week in Alberta.

Agriculture week is held on an annual basis to promote awareness of the importance of agriculture to the life and economy of the province. "It is designed to create public understanding of the relationship between all aspects of agriculture," Mr. Moore says.

This year an agriculture industry committee has been set up under the chairmanship of Dr. C. F. Bentley, faculty of agriculture, University of Alberta.

The committee's responsibilities include involving industry in telling the story of agriculture. With more than half of Alberta's gross provincial product being directly or indirectly based on agricultural production, and one out of every three Albertan's employed in an agriculture related industry, there is a big story to tell.

The Alberta agricultural hall of fame will once again "kick off" Agriculture Week. A dinner and reception will be held in Red Deer on September 30 to honor a number of Albertans who have made outstanding contributions to agriculture in the province.

For further information on Agriculture Week 1976, contact Doug Pettit, Agriculture Building,9718 - 107 Street, Edmonton T5K 2C8 or telephone 427 - 2127.

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Phone (403) 427-2127

September 20, 1976

FOR IMMEDIATE RELEASE

METRIC CONVERSION DATES FOR FARMERS

The following dates have been set by the Metric Commission for the changeover to metric units of a number of agricultural and agriculturally-related products.

Feeds and Bulk Grains

February 1, 1977, is the official metric changeover date for feeds and bulk grains. Although some feed suppliers may begin packaging their feeds in metric sizes this September, the majority are expected to wait until just before February 1, 1977. At that time feeds will be packaged in 5, 10, 20, 25 and 40 kilogram (kg) bags. Bulk grain sales will be conducted in tonnes (1,000 kg).

Equipment now in use in feed mills will not have to be replaced until it wears out or until the owner wants to change to metric units for his own convenience. For example, there is no need to calibrate automatic feeders in proportioning mixer-grinders in metric units immediately.

Seed

February 1, 1977, is also the official changeover date for seed. Field crop seeds will most likely be sold in 500 gram (g) packages and in 1, 2, 5, 10 and 25 kg bags. Corn will continue to be sold in bulk and by count (e.g. 80,000 kernels).

Garden seed will probably be packaged in 1, 2, 5, 10, 25, 50, 125, 250 and 500 g sizes. Some flower seeds, such as hybrids, may be sold in envelopes, packaged by count, as is now the case.

Seed growers who sell seed will have to convert their scale to metric units. However, farmers who custom clean but do not sell seed can use conversion tables until it is convenient to replace or convert their scales.

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Metric Conversion Dates For Farmers (cont'd)

Cash Crops

On and after February 1, 1977, deliveries and sales of cash crops will be conducted in tonnes (t) instead of in bushels. Adoption of metric units here will eliminate the time-consuming job of converting pounds to bushels.

Pesticides

January 1, 1979, is the final date for converting pesticide packaging to the metric system. Some insecticides, herbicides etc. may start appearing on dealers' shelves in metric sizes after January 1, 1977.

With existing spraying equipment, the most practical procedure will probably be to use the measuring container that has been used in the past and to measure out the same chemical proportions. However, when metric parts are substituted for any existing parts (e.g. nozzles) on the sprayer, it will be necessary to calibrate the whole system in metric units.

Fertilizers

July 1, 1979, is the official conversion date for packaged fertilizers, but fertilizers may be purchased in metric units after July 1, 1977.

Miscellaneous

Since seeding rates will not change, seed drills will be used at the same settings and spacings as before metric conversion. Hence, it will not be necessary to convert them to metric units.

Harvesting equipment will not have to be converted either. However, it will be simpler to determine yields in metric units if the combine tank, truck box and storage bins have their volumes marked on them in cubic metres.

To make it easier to calculate seed, pesticide and fertilizer requirements, it is suggested that farm maps be converted to show the number of hectares (ha), as opposed to acres, in each field.

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Metric Conversion Dates For Farmers (cont'd)

Weighing scales used by hog producers for check weighing market hogs do not need to be converted to metric units except for the operator's convenience. Equivalent measurements in kilograms can be easily marked on the scale itself when hog grading standards have been converted.

The only concern dairy farmers will have with their present equipment will be the necessity of recalibrating bulk milk tank charts, a task that will probably be done by marketing agencies, and recalibrating their measuring equipment if they are involved in a record of performance programs.

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September 20, 1976
FOR IMMEDIATE RELEASE

GRINDING SWINE FEED

Did you know that feed and feed preparation accounts for 55 to 70 per cent of the total costs of raising hogs. Hence, any processing technique or method that improves an animal's performance or makes the feed ingredients more usable can greatly lower your swine production costs.

Most farmers use a grinder, a roller or a grinder-mixer to combine the various ingredients in hog rations into a uniform mix. By breaking the seed coat in this way, a larger surface area of the kernel is exposed, facilitating more efficient breakdown of the grain by the enzymes in a pig's digestive tract.

Alberta Agriculture's swine nutritionist, Ron Lane, says the questions that most often arise in connection with processing hog rations are how finely should the various grains be ground and what size of screen should be used. Unfortunately, there are no concrete answers to these questions. Mr. Lane points out that recommendations depend upon such things as type of ingredients, the moisture content of the grains, the speed (rpm) of the grinder, the conditions and number of hammers and several other factors.

"However, as a general rule, grains which contain a considerable amount of hull, like oats, should be finely ground, whereas wheat should be coarsely ground to avoid a flour or paste-like feed," he says. "When a number of grains are being ground together, a 3/16 inch screen is usually the most satisfactory."

The most suitable screen for the common feed grains used in swine rations are:

fine - 3/32 - recommended for oats
medium - 1/8 to 3 1/6 - recommended for barley
coarse - 1/4 - recommended for wheat and corn

It is not unusual for a hog producer to have problems in the handling and feeding of processed feeds. Ground wheat and corn-based rations, for example, may 'bridge' in a self-feeder, preventing the feed from falling to the bottom of the feeder. In other cases, the feed may be so dusty that the various ingredients separate out. Still another problem may be that the feed is too finely ground resulting in indigestibility or palatability problems.

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Grinding Swine Feed (cont'd)

Sometimes a certain screen size may make the grinding so slow that it adds to the processing costs in terms of time, labor, power (energy) and wear-and-tear on the equipment.

"These problems can be alleviated or avoided," Mr. Lane says "by checking the grain periodically to make sure that it is being properly ground. If it is not, check the hammers for wear-and-tear, the condition of the screens, the screen size and the rpm. Then make any necessary adjustments or corrections."

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September 20, 1976

FOR IMMEDIATE RELEASE

CREEP FEEDING AND EARLY WEANING OF CALVES

by D. B. Karren
Alberta Agriculture regional livestock supervisor at Red Deer

Cow-calf producers anticipating insufficient pasture late this summer and fall can expect lighter weaning weights and lower returns this year.

Achieving heavy weaning weights is economically important to the cow-calf producer. Besides the extra pounds sold from heavier calves, heavier calves are selling for more per pound. The difference in return between a 300-pound and a 500-pound calf may be as much as $100.

Research has shown that the largest single factor influencing weaning weights is the milk production of the cow. Milk production is directly related to nutrition. If a cow does not have access to good pasture she cannot consume enough grass to maintain sufficient milk for good calf growth. Calves not getting enough milk from the cow cannot consume enough grass themselves to give good growth.

Producers faced with poor pasture could maintain weaning weights by:

(a) supplementing the cows with dry feed

(b) creep-feeding the calves until weaning

(c) weaning the calves early and feeding them dry feed

Each of these programs should result in heavier calves and greater returns. The economic success of supplementary feeding will depend upon a number of factors.

The beef cow is a relatively poor converter of feed to milk and subsequently to pounds of calf. With present high feed prices and low calf prices it is unlikely that providing cows with supplementary feed to maintain milk production will be economical.

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Creep Feeding and Early Weaning of Calves (Cont'd)

It makes more sense to give the feed directly to the calf.

Under normal circumstances creep feeding is economically questionable. Mature cows on good pasture give sufficient milk for the calf and little creep is eaten. The amount that is eaten results in only small increases in gain. However, cows and heifers on poor pasture do not give enough milk. Creep feeding their calves does result in heavier calves, but even under these circumstances, you can only expect conversions of one pound of gain for each 8 pounds of feed consumed.

Ninety-day old calves can be successfully weaned to dry feed. On dry feed these light calves are relatively efficient feed convertors. Each 6 pounds of feed fed should give one pound of gain. Hence, when pastures are poor, early weaning should result in heavier calves at selling time.

Although creep feeding and early weaning will result in heavier calves, they will also have added costs. The major cost will be the cost of the feed. With feed conversions of from 6:1 to 8:1, the cost of an extra 200 pounds of calf could be $60 - $80. Comparing this with an expected extra return of $100, creep feeding and early weaning could still be economical. In addition, creep feeding and early weaning will result in cows and pastures being in better shape, both of which should lead to heavier weaning weights and better reproductive performance in the following years.

September 20, 1976
FOR IMMEDIATE RELEASE

CARIBOU CLOTHES

Caribou Clothes, located at Mountain View, Alberta produces 22 different styles of sheepskin coats which are sold in 70 stores throughout Western Canada and the western United States.

Initial financing assistance for the clothing manufacturing plant was received in the form of a $16,000 grant from the federal Department of Regional Expansion and a $56,000 loan from the provincial government's Alberta Opportunity Company (AOC). The owners, Ross and Lorna Uibel, also received assistance from the Alberta Department of Business Development and Tourism's economic development representative in Lethbridge.

How did Mr. and Mrs. Uibel happen to choose Mountain View for their business? They started their business in Salt Lake City in the United States where they were living in 1967. They moved from there to Denver, Colorado,and later to Vancouver. Then they decided to move to Mountain View which was Mr. Uibel's home town. Here they lived and worked in a house trailer while their plant was being built.

Although Mountain View is not as convenient for shipping coats as many urban centres would be, it has one great advantage, according to Mr. Uibel. That advantage is its stable work force. The Uibels employ 17 people and all the ladies are from families that have lived in the area for many years.

The building, a three story structure, contains 6,000 square feet, approximately half of which is used for manufacturing the sheepskin coats. The remainder is used for the retail part of the business.

What impact is Caribou Clothes having on the Mountain View area? Mr. Uibel believes it is quite significant. "We are the only business in Mountain View", he says, "and our plant will be generating an annual payroll of $60,000 to $70,000. All this money goes to local residents who have no other source of income other than from farming or ranching." Mr. Uibel spent about $30,000 locally on materials and services while his plant was being built.

Caribou Clothes (cont'd)

He credits AOC's involvement in his venture with greatly improving his ability to obtain operating credit. "Without AOC's guarantee or backing it would be very difficult to establish a manufacturing business in a new area", he says, "especially in a predominately agricultural area like Mountain View."

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September 20, 1976
FOR IMMEDIATE RELEASE

HONEY MEAD

Did you know that honey makes excellent wine?

"Known as mead, honey wine, can be made from almost any type of honey, and it retains many of the characteristics of the honey from which it comes", says Ulf Soehngen, supervisor of apiculture with Alberta Agriculture.

Light honeys yield meads that are similar to light grape wines such as sauterne. Dark honeys, with their stronger flavor, are probably more suitable for making honey ales or bock-type beer (strong, dark-colored German beer). A clover-based honey is ideal for making a sparkling mead, and clover honey mead can be made into a light sherry by refermenting it with a special yeast.

In 1970 there were three companies listed as producing honey wine in North America. These were in London, Ontario, New York City, New York and Ohio. It is estimated that 20 tons of honey a year are used for making honey in New York City, most of which is produced for the Kosher trade. During the past few years a small quantity of mead has been imported into the United States from England and elsewhere.

Honey is also added to liqueurs, some of which have an international reputation. Best known of these is Drambuie which is made from Scotch whiskey, heather honey and several herbs. In Ireland a liqueur called Irish Mist is made of Irish whiskey, heather honey and herbs. In Poland a similar drink is called Krupnik. Its base is Polish whiskey. An American Krupnik is produced in the United States as well as Forbidden Fruit, a liqueur containing citrus fruits and American honey. Several lesser known liqueurs also use honey as all or part of their sweetening agent.

In Africa honey beers are considered to be the best of all beers and this use of honey accounts for the consumption of almost the entire honey crop in tropical and subtropical Africa. African honey beer is unlike mead in that it is a long drink. It is never left to mature, but is consumed within a day or

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Alberta AGRICULTURE

two of the commencement of fermentation. The method of brewing has a considerable number of variants as do the social circumstances under which the beer is drunk.

Apparently, honey is not used as a base for any distilled spirits such as whiskey or gin. The product of distillation may be high proof, which for practical purposes would be pure alcohol, or low proof which would contain many fusel oils, aldehydes, acids and esters. These materials, called 'congeners' give many distilled spirits their individual flavor. Is it possible that some of the world's distinctive honeys could qualify as products in this category?

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September 20, 1976

FOR IMMEDIATE RELEASE

PLANTING PEONIES

September is the best time to plant peonies, says Alberta Agriculture's horticultural specialist, Arlene Chesney.

You should plant peonies where they will receive at least half a day's sunshine, and be careful that the roots do not come in contact with manure. Manure or peat moss can be used to improve the soil, but if you have good garden soil, you will not need to add either.

When planting peonies the uppermost eyes should be covered with only two inches of soil. A good peony root will have from three to five eyes. If the soil is dry, water the peonies well after you have planted them.

Miss Chesney says peonies may not bloom until their second or third year. She recommends the following double varieties: Karl Rosenfield, Felix Crousse, Sarah Bernhardt, Festiva Maxima and Laura Dessert. There are also many new hybrid varieties on the market.

If you choose your peonies from a catalogue, watch for their ratings. These range from 0 - 10 with 10 being the best rating.

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Alberta
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September 20, 1976

FOR IMMEDIATE RELEASE

BRAND RECORDER APPOINTED

K. J. Spiller, head of Alberta Agriculture's regulatory services and feeder associations branch, has announced the appointment of Betty Gramlich as brand recorder for the province. She is the first lady to hold the position of brand recorder in Alberta.

Mrs. Gramlich grew up on a farm in south eastern Alberta, and has worked in the brand office since November 1974.

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FOR IMMEDIATE RELEASE

NEW ALBERTA COW-CALF SUPPORT PROGRAM

The Alberta Cow-calf Support Program, recently announced by Premier Peter Lougheed and Agricultural Minister Marvin Moore, consists of two parts and applies only to the 1976 production year.

The first part is an extension of the loan program that was established in 1974. Under it cow-calf producers will be able to borrow a maximum of $75 per calf to a maximum of $6,000 at an interest rate of 7 per cent.

The first proceeds from the new loan will be used to retire outstanding debts accrued from the 1975 cow-calf loan program. Cow-calf producers who have not repaid their 1974 loan will not be eligible for this part of the program.

The second part of the Alberta Cow-calf Support Program will provide about $40 million in direct payments to more than 23,000 producers to a maximum of $3,500 per producer. Designed for the smaller producers, the support payments apply to 70 per cent of the actual cow herd. However, in the case of herds of more than 100 cows, only 70 per cent of the first 100 are eligible for payment. It is anticipated that approximately 23,000 cow-calf operators will receive support payments averaging about $1,700.

The support payments will be based on the difference between the average cash costs of production in 1976 and average calf prices during this period to a maximum of $50 per calf.

Cow-calf producers who apply for these support payments will have to swear an affidavit attesting to their total amount of taxable income during the last

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Alberta

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New Alberta Cow-calf Support Program (cont'd)

taxation year ending before September 1, 1976. The total support payment provided by the government plus the applicants' latest taxable income cannot exceed $8,000.

Unless applicants can show that they operate and control a separate and distinct cow-calf enterprise, only one application will be accepted per family unit. An individual can file only one application on behalf of himself, a partnership or a company.

Cow-calf producers who want to apply for the support payments must register their cow herd with their district agriculturist and sign an affidavit attesting to the number of cows they owned on September 1, 1976 as well as to the accuracy of the other information provided. Applicants must also give right of access to inspect the cattle to a person designated by Alberta Agriculture. Herd registrations will be accepted up to December 31, 1976.

After January 1, 1977 Alberta Agriculture will calculate average prices received for calves and cash costs of production during 1976 and determine the payment to be made. Those eligible for payments should receive them before March 31, 1977.

Although all cow-calf producers residing in Alberta, and meeting the required criteria, are eligible for the support payments, those who have defaulted on previous cow-calf assistance loans will have their cheque submitted directly to the provincial treasurer.

Specific details on both parts of the new Alberta Cow-calf Support Program will be available from all district agriculturists' offices about October 15.

September 27, 1976

FOR IMMEDIATE RELEASE

RESEARCH DATA ON INSECTS THAT ATTACK RAPESEED CROPS

The economic impact of bertha armyworms and flea beetles on rapeseed production was discussed at length at a recent workshop hosted by Alberta Agriculture's plant industry laboratory. Participants included research and extension entomologists from across Canada who are employed by the National Research Council, Agriculture Canada and the provincial departments of agriculture.

Bertha Armyworms

In the case of bertha armyworms the studies showed that 10 larvae per square yard reduce rapeseed yields by 0.69 bushel per acre. Assuming a rapeseed price of $5 per bushel, the loss would be $3.45 per acre, or approximately what it would cost to spray the crop by aircraft. This means that it would pay the grower to spray if there were more than 10 larvae per square yard and rapeseed was selling for $5 per bushel.

However, determining when to spray is not as easy as it sounds because of the difficulty of finding all the larvae in a square yard. The researchers are now trying to find a way of determining the efficiency with which larvae can be found on the ground. They want to know when 10 larvae are found, for example, whether this means there are probably another five, 10, 15 etc.

Other studies are being carried out on the biology and parasitism of bertha armyworms. The goal here is to determine what percentage of worms are affected by parasites and the types of parasites that attack them. It is thought that parasites play a

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Research Data On Insects That Attack Rapeseed Crops (cont'd)

fairly important role in the fluctuation of bertha armyworm numbers from one year to another.

Flea Beetles

Studies conducted on flea beetles showed that during two out of three years, a total of three beetles per plant feeding for four days reduced rapeseed yields by about 25 per cent. Three beetles feeding for 11 days reduced yields by approximately 33 per cent.

The researchers are now studying the possibility of using two-foot wide unswathed trap strips around the edges of flea beetle-infested rapeseed fields to attract the beetles in the fall. One experiment showed that flea beetle populations increased by approximately 15 times in these trap strips when the rest of the field was swathed. Spraying the beetles in these trap strips reduces the numbers that will overwinter in the area and attack the following year's crop. Since the growth in these traps should not be too mature if they are to attract the beetles, a useful alternative might be to plant a drill-width of rape around the edges of a field about a month before the crop is to be cut. If the stubble in a swathed field contains a large proportion of green plants, the beetles can be encouraged to move into the trap strips by cultivating the stubble. Another procedure that can be used is to leave a few trap strips when cultivating volunteer rape in the spring. The beetles will congregate to feed there and will subsequently be killed by insects.

Still another study involved the susceptibility of rapeseed varieties to flea beetles. This study showed that Polish rape varieties seem to sustain more damage than the Argentine varieties. It was also observed that the beetles tended to eat the margins of the leaves in the Argentine varieties, whereas they ate the centres of the leaves in the Polish varieties.

Research Data On Insects That Attack Rapeseed Crops (cont'd)

Winter flea beetle sampling showed that large numbers of flea beetles overwinter successfully under dead leaves and in snow-covered turf in aspen poplar groves.

It has also been found that flixweed growing on uncultivated summerfallow provides a good spring feeding ground for flea beetles. This weed is an important reservoir of beetles for rapeseed that is grown in an adjacent field.

Red Turnip Beetles

Research conducted on red turnip beetles indicated that these insects seem vulnerable to control by cultivation when in the egg stage. It seems that the larvae from eggs that are buried by fall or spring cultivation cannot reach the surface of the ground. In addition to drastically reducing larval survival, cultivation destroys the plants on which the larvae feed.

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FOR IMMEDIATE RELEASE

STRAW FOR WINTER-COW RATIONS

With generally high hay prices and the relatively short supply of hay this year, cattlemen should be thinking about using straw, particularly oat and barley straw, in their overwintering cow rations, says Ron Weisenburger. Mr. Weisenburger is Alberta Agriculture's regional livestock supervisor at Calgary.

"Traditionally", he says, "we have recommended that half or slightly more than half the ration for wintering beef cows be made up of straw, providing that the cows are receiving supplementary grain. If the straw is being supplemented with good quality hay, the proportion of straw should be slightly less than half. However, more recent information suggests that higher levels of straw can be used when good quality straw is fed."

If the straw contains at least 4 per cent crude protein and less than 45 per cent acid detergent fibre, it can be used to make up about three-quarters of the winter diet of mature cows that are in average or better than average condition. However, the straw must be supplemented with grain and a protein supplement to provide a ration containing at least 7 per cent crude protein. In addition, there should be normal supplementation with minerals, vitamins and salt.

Replacement and first-calf heifers, and cows from one month before calving until re-breeding, require a larger proportion of grain in their rations than the rest of the herd. The amount of grain will also have to be increased during periods

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Straw For Winter-cow Rations (cont'd)

of abnormally cold weather because cows receiving a large volume of straw are not able to increase their intake of straw in response to the cold weather. If a good quality hay is used instead of grain to supplement straw, the straw should represent no more than two-thirds of the total ration.

" At present prices," says Mr. Weisenburger, "the use of straw at the above mentioned levels can reduce winter feed costs by 25 to 30 per cent compared with the cost of traditional hay rations." However, before attempting to feed straw at these levels, it is essential that a feed test be done on the straw and that the straw meets the quality requirements outlined above.

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September 27, 1976

FOR IMMEDIATE RELEASE

CASTRATING AND DEHORNING CALVES

During the last few falls an increasing number of calves, plus higher feed costs, have brought calf prices down considerably. In fact, some cow-calf producers who are experiencing these lower returns cannot see how they can justify investing any more time or money in their calves.

However, if the investment is in castration, dehorning and treating for warbles, it will be more than covered by the added returns, according to D.B. Karren, Alberta Agriculture's regional livestock supervisor at Red Deer.

He reports that steer calves sold at sales in central Alberta bring at least $5 per hundredweight more than bulls, and that dehorned calves sell for about $2 per hundredweight more than calves that have not been dehorned. Although the price differences between treated and untreated calves are not yet obvious, cattlemen who sold warble infested cattle last spring were charged $2 per head to cover the cost of treatment. "Hence, feeders who buy calves this fall that will be ready to sell next spring are going to be conscious of the $2 per head charge for warble infested cattle", Mr. Karren says.

He points out that unless castrating and dehorning is done by a veterinarian, cash costs should be minimal. Even if they are done by a veterinarian, castrating and dehorning should cost only about $1 per head each. Depending upon the size of the calf and the procedure used, warble treatment should cost less than 50¢ per head. Thus the maximum cost for castrating, dehorning and treating for warbles would be about $2.50 per head. However, a cattleman who castrates and dehorns his cattle can expect to average around $7 per hundred-

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Castrating and Dehorning Calves (cont'd)

weight more for his calves. With a 450-pound calf, this would amount to more than $30.

"Buyers are always looking for points to discount calves on," Mr. Karren says, "but good calves always top the market. Consequently, it is to the producer's advantage to market the best product he can."

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September 27, 1976

FOR IMMEDIATE RELEASE

A NEW RAT KILLER

A new rodent killer, known as Ratak, has been launched on a worldwide scale by Imperial Chemical Industries (ICI) in Britain.

The big advantage claimed for this new product is that, in addition to killing normal rodents, it kills 'super' rats and mice which have become resistant to anticoagulant rodenticides like warfarin.

'Super' rats were first reported in the United Kingdom in 1958, and since then have been confirmed in the United States, Denmark, France, Jamaica, India, Cyprus and Australia. They probably occur in many other countries as well.

Another advantage of Ratak is its formulation. The distinctive blue/green pellets are palatable to rodents, stay fresh when damp and are easy to use.

Cliff Barrett, in charge of Alberta Agriculture's very successful rat control program, says "We are always interested in new rat control products because rats tend to learn to avoid a bait that is used over a significant period of time. This is particularly true if the same bait is presented to rats in a specific area such as that along the Alberta-Saskatchewan border." Mr. Barrett thinks we in Alberta are very lucky that rat resistance has not developed along this border where the same bait has been used for between 20 and 25 years.

It is claimed that Ratak will have a dramatic effect on the world's rat and mouse populations. If this is true, it will result in a significant increase in world food production and in public health. The World Health Organization estimates that rats and mice are responsible for the loss of 33 million tons of food every year -- enough to feed 130 million people. It is also believed that for every person who has died in wars throughout history, at least two have died from rat-borne diseases.

ICI's Plant Protection Division, located at Fernhurst, Haslemere, Surrey, has obtained extensive marketing rights for difenacoum, the active ingredient in Ratak.

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September 27, 1976

FOR IMMEDIATE RELEASE

IRRIGATION MAGAZINE

Have you heard of the "Irrigation Age Magazine"?

Len Ring, Alberta Agriculture's irrigation systems engineer at Lethbridge, highly recommends it to farmers who are using irrigation and to those who are contemplating using irrigation. He says it is an invaluable source of information.

The magazine is published nine times a year and deals with all types of irrigation being used throughout North America. In discussions with Mr. Ring, the editor, Ron Ross, said that the magazine is available free of charge to any bonified farm. Mr. Ross was recently in southern Alberta learning more about irrigation in this province.

If you would like to receive a free subscription to this magazine, send a subscription form to: "Irrigation Age Magazine", c/o The Webb Company, 1999 Shepard Road, St. Paul, Minnesota 55116, U. S. A.

Subscription forms are available from many of the irrigation division's district offices in southern Alberta and from Len Ring, Alberta Irrigation Division, Science Building, L. C. C., Lethbridge T1J 4B3.

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September 27, 1976

FOR IMMEDIATE RELEASE

PRESERVING STRAW INTENDED FOR FEED

Farmers who are planning to use straw in their beef cattle rations this winter should consider using some type of straw catching and bunching equipment on their combines.

This suggestion is made by Alberta Agriculture's regional livestock supervisor at Calgary, Ron Weisenburger. He points out that this type of equipment will minimize the loss of leaves and chaff, both of which are the most nutritious part of the straw.

If the straw is baled it should be baled and stacked as soon as possible after combining because the quality of straw deteriorates rapidly if it is rained on. In fact, a heavy rain on straw bales will cause enough spoilage to make the straw completely useless.

The rain causes much of the protein and energy to leach out of the straw and what remains is largely the cell-wall structure of the plant. This is the least digestible portion of the straw and is usually not worth feeding.

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September 27, 1976

FOR IMMEDIATE RELEASE

CHEESE PROMOTION CAMPAIGN

A $55,000 promotion campaign, aimed at bolstering the consumption of Alberta-manufactured cheese, starts October 4, to coincide with Agriculture Week and will continue through October which is Cheese Festival Month in Canada.

Launched by the Alberta Dairyman's Association, and the first of its kind in the province, the campaign climaxes promotion work involving fluid milk and other dairy products that has been going on since March. The chairman of the promotion committee of the Alberta Dairymen's Association, Rod Nichols, says "Cheese markets in Alberta are dominated by cheese imports, but we feel that Albertans would like an opportunity to buy their favorite cheese from Alberta processors."

Despite the fact that 15 million pounds of high quality cheese are produced annually in Alberta, few residents are aware that many popular cheese varieties are available from Alberta processors. Mr. Nichols believes that part of the challenge faced by cheese producers in the province is to make Albertans aware of the availability of Alberta cheese and to let them know that the quality is excellent.

At the present time dairy farmers are caught in a difficult squeeze because they were encouraged to produce more milk, and now there is an over-supply. Meanwhile, their labor and supply costs have risen so rapidly that the price of milk to the consumer has had to go up. Hence, the need to keep consumers informed about the quality, the benefits and the production economics of milk and milk products.

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Cheese Promotion Campaign (cont'd)

"Our goal," says Mr. Nichols, "is to remind Albertans that milk is good food. They certainly get enough reminders about soft drinks, hard drinks, and coffee. Millions of dollars are spent in the province every year on promoting these products. As a result the per capita consumption of milk over the past 15 years has declined steadily. We think if milk gets some promotion, people will swing back to it."

The campaign is being funded by contributions from fluid milk producers, industrial milk and cream producers and Alberta Agriculture.

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September 27, 1976

FOR IMMEDIATE RELEASE

ROYAL AGRICULTURAL WINTER FAIR EXHIBITS

Are you planning to exhibit in the agricultural products section of the Royal Agricultural Winter Fair in Toronto? If you have a cereal, oil or forage seed crop or potatoes or vegetables that are above average in quality, do not miss this opportunity to advertise on a national scale.

Because publicity is so valuable to all agricultural producers, Alberta Agriculture is prepared to pay the cost of transportation from Edmonton to Toronto on creditable exhibits. Alberta Agriculture also contributes to the prize money, on an equal basis with the Royal, in all pedigreed seed classes and provides a special honorarium of $100 for each first prize winner in these classes. In addition, it pays an honorarium of $200 to grand championship winners in the pedigreed classes and an honorarium of $150 to reserve grand championship winners.

Exhibits for which Alberta Agriculture is paying shipping costs must be received by the Plant Industry Division, Agriculture Building, 9718 - 107 Street, Edmonton T5K 2C8 not later than October 28. The samples, which may be taken from the 1975 or 1976 crop, should be sent express paid to Edmonton.

Exhibits in the pedigreed seed classes must be drawn by federal plant products personnel from seed that was sealed or certified bulk after last year's Royal Agricultural Winter Fair and must be of a variety licensed for sale in Canada.

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Royal Agricultural Winter Fair Exhibits (cont'd)

Entry forms, available from district agriculturists, who also have a list of the classes, must be sent directly to Toronto and arrive there on or before October 9. Except for pedigreed seed entries and 4-H entries, both of which are free, the entry form must be accompanied by $l per exhibit. The address to send the entry forms to is the Royal Agricultural Winter Fair, Exhibition Place, Toronto Ontario M6K 3C3. Any exhibits sent directly to the Royal must arrive there on or before November 4.

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September 27, 1976

FOR IMMEDIATE RELEASE

AGRICULTURE COURSES

The University of Alberta's faculty of extension is offering two 10-week evening courses for people with limited knowledge and experience in agriculture who are returning to the country to live and who wish to engage in part-time or full-time farming.

The first course, entitled "Introductory Agriculture in Alberta", commences on October 6. Topics covered include an overview of the agricultural industry, buildings and machinery, soils, grains, forage, horticulture, beef and dairy cattle, swine, sheep, goats, and farm management and financing.

The second course, entitled "The Business of Farming", starts on October 5. It is recommended for people who have had some farming experience or who have taken "Introductory Agriculture in Alberta". Topics covered include the business of farming, factors in buying a farm, the purchase and maintenance of equipment, management principles (budgeting, fixed and variable costs, business arrangements such as contracts, etc.), accounting, farm law and basic tax.

The registration fee for either course is $45 which should be sent to the Agricultural Supervisor, Faculty of Extension, University of Alberta, Edmonton T6G 2G4.

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September 27, 1976

FOR IMMEDIATE RELEASE

FALL LAWN WEED CONTROL

The fall is a good time to control weeds in your lawn because at this time of year you can use herbicides without so much worrying about them damaging nearby flowers or vegetables.

Arnold Stearman of Alberta Agriculture's weed control branch recommends 2,4-D amine for killing dandelions in your lawn. You should use it on a calm day when the temperature is 20° C or higher. At a lower temperature the herbicide may not be as well absorbed by the weeds. The best way of controlling chickweed and clover is to use a herbicide containing a mixture of 2,4-D and mecoprop. It should be applied when the temperature is above 20° C.

If you have been plagued by snow mould in the spring of past years, you could use chloroneb, mercuric chloride or quintozene as a preventative measure. It should be applied just before the first snow.

Mr. Stearman recommends keeping on mowing your lawn in the fall as long as the grass is still growing. Long, matted grass provides ideal conditions for disease. However, when cutting the lawn in the fall you should set the knives on the mower slightly higher than normal so that you do not leave the roots of the grass exposed to frost.

You should not fertilize your lawn at this time of year. It needs a chance to harden-off before winter, and you should reduce watering it. However, if the soil is very dry you should give the lawn one final soaking just before freeze-up.

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September 27, 1976

FOR IMMEDIATE RELEASE

PLANTING TULIPS

Tulip bulbs should be planted as early in the fall as possible and not later than the first week in October. Bulbs that are planted early have a chance to establish roots before the soil freezes.

The planting area should have good drainage and be dug to a depth of 12 inches or more. If the soil is heavy or very sandy, you should add some well rotted manure or peat moss. Place the bulbs so that the tops are from eight to 10 inches below the soil surface. In areas where the soil is heavy clay or where snow cover comes early and can be depended upon, you do not need to plant them as deeply as this.

For the best effect, plant tulips about six inches apart in clumps or in beds where they will provide a mass of solid color. Do not plant them closer than two feet from a house foundation or they will emerge too early in the spring and be nipped by the frost. If they should come up too early anyway, you can slow their growth and protect them from frost by covering them with about six inches of snow.

According to Alberta Agriculture's horticultural specialist, Arlene Chesney, single early and double early Darwins are both popular varieties on the Prairies. Other varieties that do well in this part of Canada are Tulipa fosteriana purissima and Tulipa tarda.

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September 27, 1976

FOR IMMEDIATE RELEASE

PLANNING AND RESEARCH SECRETARIAT APPOINTMENT

Dr. J. E. Wiebe, chairman of Alberta Agriculture's planning and research secretariat, has announced the appointment of Gerry Parlby to the secretariat.

In his new position Mr. Parlby will be responsible for both intra-departmental and inter-departmental liaison as well as for making policy recommendations from an agricultural perspective on taxation, foreign issues, transportation and natural resources.

Mr. Parlby grew up on a mixed farm near Alix. He attended the University of Alberta and graduated in 1960 with a B.Sc. (agriculture), having majored in agricultural economics. He took post graduate studies at the University of British Columbia in 1969 and at the University of Alberta in 1975, specializing in resource economics.

Following graduation from the University of Alberta in 1960, Mr. Parlby joined Alberta Agriculture and spent three years as associate district agriculturist at Red Deer. He was transferred to the economics division in Edmonton in 1964 and became head of the resource economics branch seven years later. Mr. Parlby held the position of branch head at the time of his present appointment and is a member of the Provincial Planning Board.

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October 4, 1976

FOR IMMEDIATE RELEASE

LIVESTOCK (CATTLE) INSURANCE PROGRAM

Alberta's recently announced Livestock (Cattle) Insurance Program, which covers both beef and dairy cattle, is unique in that it was developed through the co-operation of the insurance industry, members of the cattle organizations and the government. Although it is a private sector program, it has a government established independent arbitration board for 'grey area' claims.

Mainly intended to protect farmers against disaster situations, the program is designed to insure cattle on a herd basis. It will replace all sections of the Livestock Indemnity Program except the one pertaining to predator losses. Predator losses will continue to be covered under the indemnity program.

A farmer using the livestock insurance program must insure all his cattle that are not registered. If he has both grade and registered animals, he can insure just his grade animals, he can insure his grade and registered animals as one herd or he can insure his grade and registered animals as two separate herds. He can value animals in the herd as high as $1,000 per animal, but the insurance underwriters have the right to question this value if it seems unrealistic relative to the market value of the animals. Animals can be insured for more than $1,000 if the owner obtains permission from the underwriters.

If the number of animals in an insured herd varies by more than 10 per cent during the life of the insurance policy, the owner is expected to report this fluctuation to his insurance agent. If the number in the herd goes down, he will be eligible for a rebate on his premium. If the number increases, he will be assessed an additional premium. If a herd owner does not report an increase of more than 10 per cent and he should have a claim, he will find that the adjustment on his claim will

- (cont'd) -

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Livestock (Cattle) Insurance Program (cont'd)

be proportionately reduced.

There are 15 perils covered under the Alberta program. They are death as a direct result of: drowning and flood; fire; electrocution (including lightning); suffocation (including suffocation due to animals piling, the collapse of roofs and buildings, electrical failures, smoke, scaring or spooking); frothy bloat (legume induced bloat on pasture); riot, riot attending a strike or civil commotion; falling aircraft or falling objects from an aircraft; vandalism and malicious acts other than those caused by the insured, his representative or other persons who have care, custody or control of the animals; wind, cyclone, tempest, tornado, storm, hail, blizzard (indirect loss); explosion; poisoning; transportation (excluding any animals transported by a common carrier with public service vehicle license plates); collapse of roofs and buildings; and new diseases declared by Alberta Agriculture's veterinary services division but excluding diseases named or declared under or added to the Canadian government's Contagious Diseases Act. Theft (excluding escape or mysterious disappearance) is also covered by the program.

The program contains four deductible plans from which cattlemen and dairymen may choose.

Plan I

Under this plan there is a 10 per cent deductible clause which applies only to losses from suffocation; frothy bloat; poisoning; new diseases and indirect losses from wind, cyclones, etc. It is subject to a minimum deduction of four animal units and to a maximum deduction of 30 animal units. An animal unit is a mature cow, an in-calf heifer, a yearling steer or a yearling heifer. A calf that is six to 12 months old is considered to be half an animal unit. Calves less than six months old

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Livestock (Cattle) Insurance Program (cont'd)

are automatically insured under their dam's premium.

In this plan the underwriter pays 80 per cent of the total loss incurred by perils not subject to the 10 per cent deductible. In the case of the perils that are subject to the 10 per cent deductible clause, losses must exceed 10 per cent of the animal units in the herd before the owner has a claim. However, once he has a claim, those animals that made up the first 10 per cent are automatically covered in the settlement, which is based on 80 per cent of the insured value of the herd.

The insurance rate for this plan is 75¢ per $100 of insured value.

Plan 2

Under this plan there is a 5 per cent deductible clause which applies to all the perils covered by the insurance program. The deductible clause is subject to a minimum of two animal units and a maximum of 15 animal units.

In this case losses from any of the perils covered by the program must exceed 5 per cent of the animal units in the herd before the owner has a claim. As in the above plan, once he has a claim, those animals, which, in this case made up the first 5 per cent, are automatically covered in the settlement which, again is based on 80 per cent of the insured value of the herd.

The insurance rate for this plan is 75¢ per $100 of insured value.

Plan 3

Under this plan there is a 10 per cent deductible clause which applies to all the perils covered by the program. It is subject to a minimum of four animal units and a maximum of 30 animal units.

This plan works on the same principle as Plan 2 except that losses from any of the perils covered by the program must exceed 10 per cent of the animal units in the herd before the

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Livestock (Cattle) Insurance Program (cont'd)

owner has a claim.

The insurance rate for this plan is 50¢ per $100 of insured value.

Plan 4

This plan is exactly the same as Plan I except that the deductible clause is 5 per cent instead of 10 per cent and the minimum deductible is two animal units and the maximum deductible is 15 animal units.

The insurance rate for this plan is $1 per $100 of insured value.

Anyone who has a claim under any of these plans should report it immediately by calling the zenith number he will be given with his policy. In the case of a 'grey area' claim, the underwriters, Co-operative Insurance Services and Lloyds of London, can refer it to the independent arbitration board which has been set up by the minister of agriculture. If the insured is not satisfied with the board's decision, he can appeal it through the farmer's advocate.

Further details on the Livestock (Cattle) Insurance Program can be obtained from district agriculturists,insurance agencies and Agri Insurance Services, # 1, 12415 Stony Plain Road, Edmonton T5N 3N3.

October 4, 1976

FOR IMMEDIATE RELEASE

CREAM AND MILK QUOTAS INCREASED

Alberta's minister of agriculture, Marvin Moore, has announced major quota changes affecting the province's cream producers and producers of milk for manufacturing purposes.

Cream and milk producers will now be permitted to deliver to the full amount of their market share quota without being subject to assessment of over quota levies. This should be a welcomed measure because until now, producers could only deliver up to 94.5 per cent of their quota.

In addition, cream and milk producers throughout the province will have their market share quotas increased by 5 per cent.

The Alberta Dairy Control Board will continue to provide additional quota for extraordinary circumstances as outlined in the dairy announcement of April 1976.

Dairymen will be receiving notice of their adjusted quotas on their dairy position cards which will be mailed to them in mid-October.

The minister added that these adjustments will significantly assist Alberta's cream producers and producers of milk for manufacturing purposes who are currently operating under cutbacks imposed by the Canadian Dairy Commission.

Mr. Moore was pleased that most dairy farmers reacted satisfactorily to the dairy policy that called for a cutback in quotas by adjusting their production to meet their quota limitations. This adjustment in Alberta has permitted the distribution of this additional quota.

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October 4, 1976

FOR IMMEDIATE RELEASE

FEED SAMPLING PARTICULARLY IMPORTANT THIS YEAR

It is always important to have livestock feed analyzed before formulating a ration, but it is even more important this year because so much of the hay is low quality and because considerably more straw will be fed this winter to cut production costs.

Alberta agriculture's animal nutritionists, Jerome Martin, says there will be a much finer line this year than usual between hay that meets the basic requirements of beef cow maintenance rations and hay that does not. If the information sheets that are included with the sampling kits are properly filled out, which includes outlining the proposed ration, the staff who analyze the feed will be able to suggest appropriate supplements, when these are needed, or a combinations of feeds that might be used to provide a balanced ration.

Although many people think of straw as just straw, there is a great deal of variation in its fibre content and its protein content. Some straw, particularly oat and barley straw, is of very good quality and can be used as the basis of nutritious beef cow maintenance rations when supplemented with hay, grain or a protein supplement. In fact, a good quality straw contains almost as much energy as good hay. On the other hand, very poor quality straw would be better used for bedding than as feed because of the cost involved in adequately supplementing it.

Chaff, either fed alone or in combination with straw, can also vary greatly in quality, depending upon the amount of grain and weed seeds it contains. In some cases it will be of such high quality that very little supplementation will be required.

Grain, like roughage, varies in its energy and protein content. Hence, anyone who plans to use his own feed this winter must have each feed component analyzed if he wants to formulate an adequate low cost ration.

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Feed Sampling Particularly Important This Year (cont'd)

All district agriculturists have the necessary equipment for taking forage and grain samples and the information sheets which should accompany each sample. The samples should be sent to the Alberta Soil and Feed Testing Laboratory, O. S. Longman Building, 6909 - 116 Street, Edmonton, T6H 4P2. The analysis fee for each sample submitted is $2.

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October 4, 1976

FOR IMMEDIATE RELEASE

TAKE SOIL SAMPLES THIS FALL

There are still some farmers who are not completely sold on the idea of an annual soil test and who are not familiar with the sampling procedure.

If you are one of these farmers you may be interested in the following questions and their answers, given by Richard Leitch of the Alberta Soil and Feed Testing Laboratory.

What do I get out of soil testing?

If you are not soil testing, you are guessing at your 1977 fertilizer requirements. Soil testing can tell you the amount of plant nutrients that remain in the soil after you have harvested your crop and the nutrients that should be replenished for next year's crop.

Without the knowledge obtained from a soil test, you might apply 40 pounds of anhydrous ammonia per acre and 40 pounds of 11-48-0 per acre on stubble land where you intend to grow a barley crop next year. A soil test of that field might show that you needed to apply 70 pounds of anhydrous ammonia per acre and 50 pounds of 11-48-0 per acre. The additional fertilizer could result in a yield increase that would more than double, and likely triple, the additional fertilizer expenditure as well as pay for the soil test.

A soil test also includes information which may help to explain why a particular field has never produced well or has produced poorly in recent years. Such a cropping problem could be being caused by a nutrient imbalance or the deficiency of a particular plant nutrient which has not been corrected in your previous fertilizer program. There are many other reasons for less than optimum crop growth, and many of them are readily identified by a soil analysis.

When should I take my soil samples?

Analysts at the soil and feed testing laboratory recommend sampling cultivated fields intended for spring planting any time after October 1. Soil temperatures are low enough

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Take Soil Samples This Fall (cont'd)

after that date that little change in nutrient levels will occur before freeze-up. Hence, the fall soil test results will accurately predict your spring fertilizer requirements. Sampling frozen soil is not recommended because it is almost impossible to get a representative sample when the ground is frozen.

How long does it take to get soil test results back?

At the Alberta Soil and Feed Testing Laboratory all samples are analyzed on a first-come, first-serve basis. To avoid the fall rush, it is important to get your samples in as soon as possible.

At the present time soil samples are being processed within a week to 10 days. However, as the volume of samples increases, there will be a longer delay. If you plan a fall application of nitrogen, you should take your soil sample as soon as the crop is harvested and submit it immediately.

If your soil test report is not returned in time for you to determine your fall nitrogen requirements, you will at least know how close your fall application rate was to the recommended level when you get the report. If necessary you can apply the balance next spring.

Soil samples should always be taken before a nitrogen fertilizer is applied in the fall. Taking soil samples after an application of nitrogen is not recommended because it may not be possible to detect the type of fertilizer (e.g. urea) that was applied. In that case the recommendation for additional nitrogen could be too high.

How do I take soil samples?

You should take 0 to 6-inch soil samples from 15 or 20 places in the field. Then, thoroughly mix the samples together in a clean pail and submit approximately one pint of the mixture for testing. Do not mix soil samples that come from fields with different management or a

- (cont'd) -

Take Soil Samples This Fall (cont'd)

different cropping history. The fertilizer requirements may be quite different for each field.

Air-dry your soil samples as soon as you have collected them by spreading the soil thinly on clean paper for two or three days at room temperature. Failure to properly dry the samples could cause a nitrogen build-up, and this could result in a recommendation that was too low for the crop to be grown next year.

Although 0 to 6-inch soil samples are adequate for a regular nitrogen evaluation on fallow or legume breaking, a more accurate evaluation can be given if samples are also taken at depths of 6 to 12 and 12 to 24 inches.

When taking samples, avoid small areas where crop growth was abnormally poor last summer (e.g. eroded knolls) because the soil in these areas will be quite different to that in the rest of the field. However, if these poor growth areas are large enough to warrant special management, take samples at several depths (0-6, 6-12, 12-24 inches) and keep these samples separate from the other samples taken in the field. An analysis of these separate samples will tell you how the soil differs from the rest of the field, and how it could be managed differently to bring crop production up to that in the remainder of the field.

Mr. Leitch believes that the nitrogen level on fallow fields may be below normal this fall because of the abnormally dry spring and the excessive amount of moisture in August. "Soil testing is the best way to determine the actual nitrogen level on summerfallows," he says, "and whether additional nitrogen is required for next year's crop. In years of heavy growth, like this year, the nutrient demand and 'up-take' by crops is considerably increased with the result that the soil's reserves of plant nutrients, such as nitrogen, are likely to be depleted."

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Take Soil Samples This Fall (cont'd)

Further information and soil sampling equipment are available from your district agriculturist. Samples should be sent to the Alberta Soil and Feed Testing Laboratory, O. S. Longman Building, 6909 - 116 Street, Edmonton T6H 4P2. The fee is $2 for a regular sample.

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October 4, 1976

FOR IMMEDIATE RELEASE

IRRIGATION WATER QUALITY GUIDELINES

Farmers who are planning to set up a private irrigation system should have a sample of the water they intend to use analyzed before proceeding with the project unless the water comes from one of the main rivers in the province.

This advice comes from Dave Graveland, head of the technical development branch with Alberta Environment. He points out that while the quality of water obtained from major surface streams is generally suitable for irrigation, that which comes from a slough or directly from the groundwater table is often not suitable.

The addition of irrigation water with a high salt content can increase the salt content of the soil to undesirable levels. An excessive amount of calcium, magnesium and sodium, for example, will interfere with the ability of plants to extract water from the soil. Excessive sodium in relation to calcium and magnesium will destroy the soil structure and reduce its permeability to water and air. Toxic effects to crops may also occur from too high a salt content in the soil.

Some water samples may be just on the borderline of being usable or not usable. In these cases usability will depend upon such things as the climate of the area, the amount of water to be applied, the crops to be grown and the internal drainage of the soil.

The moisture deficit in an area will dictate the amount of water that has to be applied, and, consequently, the amount of salt that will be added to the soil.

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Irrigation Water Quality Guidelines (cont'd)

Light, frequent irrigation results in less leaching of the salt out of the plant root zone than less frequent, heavy applications. Light, frequent irrigation also results in more evaporation than heavier, infrequent irrigation and, hence, the accumulation of more salts in the root zone. Fall irrigation is one way of leaching excess salts from the root zone when there is good subsurface drainage because there is no plant growth to take up the moisture.

Crops with a high consumption of water will require more irrigation water than those with a lower consumption rate which, again, results in a higher application of salts. On the other hand, good subsurface soil drainage, whether natural or artificial, will facilitate the rapid leaching of the salts out of the plant root zone.

Water samples for analysis may be left with your district agriculturist or local irrigation specialist or taken directly to the Alberta Environment laboratory in Lethbridge. The water analysis service is free when the samples are submitted through a district agriculturist or irrigation specialist. Otherwise there is a small charge.

Anyone who needs help to interpret his water analysis results should contact his local irrigation specialist.

Following is a list of irrigation specialists in southern Alberta and their locations.

S. Noreika, 215A - 16 Ave. N. E., Calgary (Phone - 276-6622)
D. Roll, P.O. Box 1318, Brooks (362-5551)
C. Nilsson, Provincial Building, Medicine Hat (527-8861)
J. Wauters, P.O. Box 588, Vauxhall (654-2589)
W. Chinn, P. O. Box 640, Taber (223-4471)
D. Wentz, Science Bldg., LCC, Lethbridge (329-5136)

October 4, 1976

FOR IMMEDIATE RELEASE

FERTILIZING DRY PASTURES

by Andy Birch
Alberta Agriculture's District
Agriculturist at Stettler

Since we had a fairly cool, dry spring this year, many farmers and ranchers have been wondering whether it is worthwhile to apply fertilizer to grassland pastures. I talked with a few farmers who had applied a nitrogen fertilizer this spring and they indicated, that despite the lack of moisture, there was a definite yield advantage from fertilizing. Soil testing will assist in deciding how much and what type of fertilizer can be economically applied.

Dr. D. K. McBeath, soils specialist at the Lacombe Research Station, is currently testing the growth response of various forages to different levels of nitrogen and phosphorus fertilizer applications. This particular forage demonstration plot is situated in the county of Stettler.

I had an opportunity to look at the plots before they had been clipped. It was easy to see the effects of the lack of moisture this spring upon growth and yield. However, the effects were even more evident between the fertilized and unfertilized grass plots. The experiment suggests that the effects of moisture deficiency upon growth and yield become even more pronounced when there is a shortage of nitrogen in the soil.

The experiment showed first-cut yields from a pure stand of brome grass and a pure stand of pubescent wheatgrass had a considerable yield advantage from the application of a nitrogen fertilizer. The dry matter yield of brome that had received 45 pounds of actual nitrogen per acre was almost twice that obtained from the unfertilized plot. The plot that received 89 pounds of nitrogen yielded about 2 and 2.3 times that of the unfertilized plot.

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Fertilizing Dry Pastures (cont'd)

The dry matter yield of pubescent wheatgrass that had received 45 pounds of nitrogen per acre was about 1.4 times greater than the unfertilized plot of pubescent wheatgrass.

An interesting article recently appeared in the "Weekly Letter" publication of the Lethbridge Research Station. Dr. L. E. Lutwick, a soil scientist at the station, describes the effect of low nitrogen levels on forage production.

"Low yields of cultivated grasses in the black and dark brown soil zones are often ascribed to low temperatures or soil moisture in spring. Important as these are, the real culprit is a lack of soil nitrogen. With the same soil moistures and temperatures, grass yields were up to 7 times higher than those obtained on unfertilized plots when nitrogen was applied in the fall. That is, adequate nitrogen must be present so that the grasses can take advantage of available spring moisture.

"At the Lethbridge Research Station, we have been studying the effect of nitrogen on grass production in relation to the available moisture supplies.

"At four locations in southern Alberta, soil moisture contents in the spring of 1974 and of 1975 were nearly alike but, during the growing season, there was more rain and higher temperatures in 1975 than in 1974. This year, 1976, spring soil moisture was low and May was cold and dry. On the basis of these weather factors, highest yields of hay would be expected in 1975 and lowest yields in 1976. Where no fertilizer was applied, yields were indeed lowest in 1976 but, in 1975, they were often lower than in 1974. Nitrogen fertilizer applied in the preceding fall increased grass hay yields in all three years at all four locations. However, in 1974,

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Fertilizing Dry Pastures (cont'd)

the yields were only about twice that with no fertilizer; in 1975 and 1976, yields were increased 2 to 7 times.

"These relationships indicate that the grass crop produced in one year tends to deplete the soil nitrogen so that the crop produced in the next year cannot take advantage of spring moisture. Even in unfavorable years, such as 1976, when moisture supplies are low, added nitrogen fertilizer increases the ability of the grass to use the moisture that is available.

"We have been applying nitrogen fertilizer in the fall after growth ceases. This ensures that nitrogen will be available in the early spring when the land may not bear machinery, and it can be done when demand for farm labor is relatively low. In the first year, we applied nitrogen at 150 pounds per acre. In succeeding years, we applied up to 1.5 times the amount of nitrogen removed in the harvested crop; that is, between 70 and 100 pounds per acre. This rate has not produced maximum yields. Nonetheless, over the three years, about 3 pounds of hay were produced for each one cent's worth of nitrogen applied. Thus, an increased yield of one ton of hay only cost about $6 of nitrogen fertilizer."

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October 4, 1976

FOR IMMEDIATE RELEASE

WINTER STORAGE OF BULBS

Gladioli, dahlias and begonias should be left in the ground until their tops have turned brown or until the tops have been killed by frost. The main concern is that the bulbs be dug up before the ground freezes.

"An unfinished basement or a cold storage room is ideal for keeping bulbs over the winter, " says Arlene Chesney, Alberta Agriculture's horticultural specialist, "The tops of the gladioli and dahlias should be removed when the bulbs are dug, but the begonia tops should be allowed to dry before they are broken off."

All three types of bulbs should be left at room temperature for about a week to remove excess moisture before they go into storage.

Gladioli bulbs should be stored dry and have a good circulation of air around them. Circulation can be achieved by putting the bulbs in perforated paper bags, old nylon stockings, onion sacks hung from the rafters or flats that have mesh bottoms.

Both dahlias and begonias should be stored in a moist media like peat moss, vermiculite or perlite. It is a good idea to check the bulbs occassionally during the winter to make sure that they are not drying out. If they are starting to shrivel, sprinkle them with water.

Miss Chesney recommends storing all bulbs at about $5^{o}C$.

More detailed information on storing bulbs can be obtained from Canada Agriculture's publication entitled "Storing Bulbs". It is available from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton.

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October 4, 1976

FOR IMMEDIATE RELEASE

COMING AGRICULTURAL EVENTS

International Dairy Federation
Quebec Hotel
Quebec, P. Q. . . . . October 3 - 8

Hall Commission Public Hearing
Vancouver Hotel
Vancouver, B. C. . . . . October 4 - 7

American Society of Agricultural Engineers Pacific
Northwest Region Annual Meeting
Penticton Inn
Penticton, B. C. . . . . October 6 - 8

Symposium on Feeding Health of Dairy Cows
Centre Municipal des Congres
900, Dufferin, Quebec. . . . . October 7

World Dairy Exposition
Atlantic City, New Jersey
U. S. A. . . . . October 10 - 14

Western Committee on Crop Pests
Canada Agriculture Research Station
Saskatoon, Saskatchewan . . . . . October 19 - 21

Western Committee on Livestock Pests
Canada Agriculture Research Station
Saskatoon, Saskatchewan . . . . . October 19 - 21

Western Pesticide Forum
Canada Agriculture Research Station
Saskatoon, Saskatchewan . . . . . October 19 - 21

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Coming Agricultural Events (cont'd)

Western Committee on Plant Disease Control
Canada Agriculture Research Station
Saskatoon, Saskatchewan . . . . . October 19 - 21

Poultry Servicemen's Workshop
Banff Center
Banff, Alberta . . . . . October 19 & 20

Canadian - American Stars Sale (Holstein)
Institut de Technologie
St-Hyacinthe, Quebec . . . . . October 22

Interprovincial Seed Growers-trade Annual Meeting
Ramada Inn
Winnipeg, Manitoba. . . . . October 25 & 26

Canadian Bankers Association Agricultural Credit
Conference - 1976
Saskatchewan Hotel
Regina, Saskatchewan . . . . . October 25 - 27

Canada Grains Council Semi-Annual Meeting
Vancouver Hotel
Vancouver, B. C. . . . . October 27 & 28

Alberta Honey Producers Co-operative Limited Annual Meeting
Mayfield Inn
Edmonton, Alberta . . . . . November 2

International Salon of Food and Agriculture
Place Bonaventure
Montreal, P. Q. . . . . November 2 - 7

Forage Seminar
Kinsmen Centre Stampede Park
Calgary, Alberta . . . . . November 3

- (cont'd) -

Coming Agricultural Events (cont'd)

Alberta Broiler Growers' Marketing Board
Four Seasons Hotel
Calgary, Hotel . . . . . November 3

United Grain Growers Annual Meeting
Bessborough Hotel
Saskatoon, Saskatchewan . . . . . November 3 & 4

Alberta Beekeepers Association Annual Convention
Edmonton Plaza Hotel
Edmonton, Alberta . . . . . November 3 - 5

Sprinkler Irrigation Association Annual Convention
and Management Seminar
Newporter Inn
Newport Beach, California, U. S. A. . . . . November 7 - 10

Women of Unifarm Convention
Macdonald Hotel
Edmonton, Alberta . . . . . November 8 & 9

Farmfair '76
Edmonton Exhibition Grounds
Edmonton, Alberta . . . . . November 9 - 19

Canadian Simmental Association Annual Meeting
Harbour Castle Hotel
Toronto, Ontario. . . . . November 11 - 14

Royal Agricultural Winter Fair
The Coliseum, Exhibition Grounds
Toronto, Ontario. . . . . November 12 - 20

Salon International de L'Alimentation (Food Products Show)
Pare des Exposition
Paris, France . . . . . November 15 - 20

Alberta Association of Municipal Districts and Counties
MacDonald Hotel
Edmonton, Alberta . . . . . November 16 - 19

- (cont'd) -

Coming Agricultural Events (cont'd)

Alberta Seed Potato Growers Association
Highlander Motor Hotel
Calgary, Alberta ..... November 17

Alberta Poultry Hatchery Association
Crossroads Hotel
Calgary, Alberta ..... November 17

Alberta Potato Growers Association
Highlander Motor Hotel
Calgary, Alberta ..... November 18

Alberta Potato Commission
Highlander Motor Hotel
Calgary, Alberta ..... November 19

Mexabition 1976
Saskatoon, Saskatchewan ..... November 19 - 22

Canadian Association of Professional Apiculturists
Holiday Inn
Winnipeg, Manitoba. ..... November 20 & 21

Alberta Simmental Association Annual Convention
Palliser Hotel
Calgary, Alberta ..... November 22 - 24

Canadian Honey Council
Holiday Inn
Winnipeg, Manitoba. ..... November 22 - 25

Canadian Land Reclamation Association Meeting
Arboretum Centre, University of Guelph
Guelph, Ontario ..... November 23 - 25

Alberta Cattle Commission Annual Meeting
Mayfield Inn
Edmonton, Alberta ..... November 25

Canadian Western Agribition
Regina, Saskatchewan ..... November 26 - December 3

Annual Meeting of the American Society of Agronomy, Crop Science
Society of American, and Soil Science Society of America
Houston, Texas, U. S. A. ..... November 28 - December 3

- (cont'd) -

Coming Agricultural Events (cont'd)

Cattlemen's Shortcourse
Banff, Alberta . . . . . November 28 - December 3

Canada Weed Committee (West Section)
Holiday Inn
St. Mary Ave. Winnipeg, Manitoba . . . . . November 30 - December 2

Royal Smithfield Show
Earlscourt, London, England. . . . . December

Alberta Irrigation Projects Association 35th Annual Meeting
Park Plaza Motor Hotel
Lethbridge, Alberta. . . . . December I

Unifarm Annual Convention
MacDonald Hotel
Edmonton, Alberta . . . . . December 6 - I0

Alberta Hereford Association Annual Meeting
Red Deer Lodge
Red Deer, Alberta . . . . . December I3 & I4

1977

Palliser Wheat Growers Association Annual Meeting & Convention
Holiday Inn
Saskatoon, Saskatchewan . . . . . January 4 - 6

Western Agricultural Conference
Hotel not known
Regina, Saskatchewan . . . . . January I3 & I4

Alberta Co-op Seed Cleaning Plants Limited
MacDonald Hotel
Edmonton, Alberta . . . . . January 20 - 22

Alberta Rapeseed Growers' Association
MacDonald Hotel
Edmonton, Alberta . . . . . January 20 & 2I

Western Stock Growers' Association
Banff Springs Hotel
Banff, Alberta . . . . . January 24 - 26

Canadian Farm and Industrial Equipment Show
Coliseum, One Grounds
Toronto, Ontario. . . . . January 3I - February 4

- (cont'd) -

Coming Agricultural Events (cont'd)

Canadian Charolais Association Annual Convention
Red Oak Inn
Brandon, Manitoba . . . . . February 3 - 5

Alberta Dairymen's Association Annual Meeting
Palliser Hotel
Calgary, Alberta . . . . . February 7 - 9

Canadian Federation of Agriculture
Chateau Laurier
Ottawa, Ontario . . . . . February 8 - 10

Prairie Implement Manufacturers Association
Palliser Hotel
Calgary, Alberta . . . . . February 9 - 11

Western Canadian Society for Horticulture
Hotel not known
Winnipeg, Manitoba. . . . . February (third week)

Alberta Poultry Industry Conference
Mayfield Inn
Edmonton, Alberta . . . . . February 22 - 24

National Mastitis Council Annual Meeting
Louisville, Kentucky, U. S. A. . . . . February 22 & 23

Alberta Commercial Egg Producers Association
Mayfield Inn
Edmonton, Alberta . . . . . February 23

Alberta Turkey Association
Mayfield Inn
Edmonton, Alberta . . . . . February 23

Alberta Egg & Fowl Marketing Board
Mayfield Inn
Edmonton, Alberta . . . . . February 24

Canadian Seed Growers Association, Alberta Branch Annual
Meeting and Shortcourse
Red Deer Lodge
Red Deer, Alberta . . . . . February 28 - March 1

- (cont'd) -

Coming Agricultural Events (cont'd)

Calgary Seed Fair
Stampede Grounds
Calgary, Alberta . . . . . February 28 - March 2

Salon Internationale de Agriculture
Paris, France . . . . . March

Canadian Horticulture Council
Chateau Laurier
Ottawa, Ontario . . . . . March (First week)

Agriculture Expo (Annual Seed Fair, Agriculture Shortcourses
& Machinery Displays)
Lethbridge & District Exhibition
Lethbridge, Alberta . . . . . March 2 - 5

Canadian Safety Council Farm and Rural Safety
Advisory Committee
Edmonton, Alberta . . . . . March (Third week)

Canadian Western Stock Show and Sale and Rodeo
Edmonton Exhibition Grounds
Edmonton, Alberta . . . . . March 20 - 26

International Agricultural Plastics Congress 1977
Town & Country Hotel Convention Center
San Diego, California, U. S. A. . . . . April 11 - 16

Fourth Canadian Symposium on Remote Sensing
Quebec City, P. Q. . . . . May 16 - 18

World Aberdeen Angus Forum
Edinburgh, Scotland . . . . . June 10 - 23

1977 Alberta Pork Congress
Exhibition Grounds
Red Deer, Alberta . . . . . June 21 - 23

Highland Show
Edinburgh, Scotland . . . . . June 21 - 24

American Society of Agricultural Engineers
North Carolina State, Raleigh, N.C. U. S. A. . . . . June 26 - 29

- (cont'd) -

Coming Agricultural Events (cont'd)

International Symposium on Hydrology
Fort Collins, Colorado, U. S. A. . . . . June 27 - 29

National Institute of Farm Safety Inc.
Toronto, Ontario. . . . . July (First week)

Canadian Seed Growers Association Annual Conference
Regina Inn
Regina, Saskatchewan . . . . . July 13 - 15

Third International Farm Management Congress
Hamburg, West Germany. . . . . July 17 - 22

Alberta Polled Hereford Club - Annual Meeting
Alberta Hereford Centre
Innisfail, Alberta . . . . . August 13

Agricultural Institute of Canada
University of Guelph
Guelph, Ontario . . . . . August 14 - 18

Royal Agricultural Society of the Commonwealth - Alberta Tour
Calgary & Edmonton, Alberta. . . . . November 20 - 24

Canada Weed Committee (Western Section)
MacDonald Hotel
Edmonton, Alberta . . . . . November 29 - December 1

Alberta Irrigation Projects Association 36th Annual Meeting
Park Plaza Motor Hotel
Lethbridge, Alberta. . . . . December

Seventeenth Tri-Annual International Conference of Agricultural Economists
Banff Centre
Banff, Alberta . . . . . September 5 - 15, 1979

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AGRI-NEWS

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CANADIANA

October 11, 1976

FOR IMMEDIATE RELEASE

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POOR SUMMER FOR ALFALFA LEAFCUTTER BEES

Dr. Peter Pankiw of the federal research station at Beaverlodge enthusiastically showing alfalfa leafcutter bees and their nests in a polyethylene shelter which he designed.

This last summer was a disaster for the alfalfa leafcutter bee trials at Triangle in the Peace River region, according to John Reid, Alberta Agriculture's district agriculturist at Peace River.

He says that Dr. Peter Pankiw of the federal research station at Beaverlodge expects to recover only about 25 per cent of the number of bee cells he put out last spring. "This," says Mr. Reid, "is a far cry from the 100 to 300 per cent recovery rate that Dr. Pankiw has come to expect over his almost 10 years of experimentation."

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Poor Summer for Alfalfa Leafcutter Bees (cont'd)

Domestic leafcutter bees are necessary for reliable and profitable alfalfa seed yields. Although native leafcutters and bumble bees will also pollinate this crop, their numbers are usually too low and are always unreliable. Honey bees are poor pollinators of alfalfa because the alfalfa flower has a peculiar way of tripping.

The fact that alfalfa leafcutter bees, unlike other leafcutter species, like to live in close proximity to their own kind and are willing to live in man-made nests has made it possible to domesticate these insects.

The nests consist of quarter-inch holes in wood or styrofoam that are four inches deep. The female leafcutter can build as many as nine individual egg cells in each hole and the holes are fabricated in such a way that the cells can be removed in the fall and stored at a temperature of about $5^{o}C$ until the following spring. During a long, warm summer one female may fill one or more of these nests with egg cells.

The nests are contained in boxes that vary in size from 6 inches up to two feet square. Each nest box contains several thousand nests, and there are usually about half a dozen of them at one field sight.

In the past it was felt that the Peace River region was too cool for leafcutter bees to be successfully used to pollinate alfalfa crops. However, Dr. Pankiw overcame this difficulty in normal years through the use of a special shelter which he designed himself.

The shelter is made of ultra-violet resistant polyethylene sheeting (4 or 6 ml) stretched over wooden frames. The frames are placed over and around the nest boxes, leaving the southern exposure open. It has been found that the bees are more inclined to go out and work when the shelter is open to the south than when it is open to the north, east or west. One shelter is needed for each acre of alfalfa because alfalfa leafcutters will only fly up to a distance of 35 yards.

- (cont'd) -

Poor Summer for Alfalfa Leafcutter Bees (cont'd)

"The shelters," says Mr. Reid, "can raise the temperature around the nest boxes by as much as 5° C. in the daytime and 2° C. at night. Leafcutters need a temperature of 20° C. before they will work. In fact, not much work is done until the temperature is above 23°C. Thus an increase of 5°C. in the area around the nests is very significant in getting the bees to leave their nest boxes and to go out and work.

The alfalfa leafcutter bee's life cycle begins in June when the insect emerges as an adult from its cocoon. There are twice as many males as females, but the females do all the work. They pollinate the flowers and bring home pieces of alfalfa leaves for building their cells. The males simply hang around the nest boxes and chase the females.

No honey is produced by leafcutters -- just more bees -- and, as a result of the increased bee population, more alfalfa seed. Mr. Reid says Dr. Pankiw started his leafcutter bee project in the Peace River region in 1970. Since that time the bees have multiplied through five generations of natural increase from 30,000 cells to 1.5 million cells, and Dr. Pankiw has come to expect an average of about 400 pounds of alfalfa seed per acre from pollinated fields. Last year one field yielded 1,100 pounds of seed per acre. "This summer's alfalfa seed yield has not yet been measured," says Mr. Reid, "but it will be very low."

Through his research Dr. Pankiw has discovered that poor seed yields are often the result of injurious insects. Apparently there have been many cases where the leafcutters did a good job of pollinating, but very little good seed was harvested. However, these injurious insects can be controlled with insecticides before the leafcutters are put out in the fields.

The problem this year was that after the bees were placed in the field in early July there were only five days when the temperature went above 20°C. and only a very few hours when it went above 23°C. This means that the bees were not gathering food, laying eggs or pollinating the seed.

Poor Summer For Alfalfa Leafcutter Bees (cont'd)

There is a bright spot, however. Dr. Pankiw thinks that the bees which did get out and work are probably more adapted to cooler temperatures than those that stayed at home. "If this is the case," says Mr. Reid, "the cool, rainy weather may have provided a tool of natural selection, and we may now have a strain of alfalfa leafcutters that is highly productive under the climatic conditions of northern Alberta."

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CORRECTION to "Coming Agricultural Events" (October 4 issue of Agri-News)

The Western Stock Growers' Association Annual Meeting will be held at the Westlander Inn, Medicine Hat, Alberta, from January 24-26, 1977. It will NOT be at the Banff Springs Hotel, Banff, Alberta, as stated.

October 11, 1976

FOR IMMEDIATE RELEASE

A PROMISING FORAGE CROP

Fababeans definitely have a place in livestock feeding programs.

This is the opinion of Albert Meston, an agricultural fieldman who has been involved in Alberta Agriculture's fababean field trials. These trials have been going on for several years now.

"On-the-farm feeding trials conducted by growers during the past two years indicated conclusively, " says Mr. Meston, "that fababean forage fed to dairy and beef cattle produce excellent results and that the forage can be fed as dry sun-cured hay or as silage." In either case, the beans are palatable, highly nutritious and readily accepted by cattle when fed straight or as a supplement to other rations.

According to Mr. Meston, most dairymen noted a significant increase in milk volume and butterfat content shortly after their cows were introduced to fababean silage. In at least two instances similar results were noted when green, freshly chopped fababean plants were fed instead of hay during the summer months. "In each case the feed bunks were literally licked clean," Mr. Meston says.

Beef producers have also reported growing and fattening cattle respond well to the inclusion of fababean silage in their feeding programs. Feed intake was apparently higher than is the case with most other types of silage and weight gains were corresponding - ly higher.

A beef feeder with a sizeable operation north of Edmonton found that a mixture of fababeans and freshly threshed damp barley was completely digestible when fed to his cattle, and that it was high in energy. Feeding barley in this manner eliminated the necessity of rolling or otherwise processing it before it was fed and also eliminated the

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A Promising Forage Crop (cont'd)

problems usually associated with storing out-of-condition grain.

Mr. Meston reports that of the estimated 10,000 acres of fababeans grown in Alberta this year, approximately 8,500 acres were harvested as forage and that most of the forage was put up as silage.

Last summer's fababean yields varied from 6 to 16 tons per acre (wet weight) and averaged 12 tons per acre when the moisture content was about 65 per cent. The quality varied somewhat in relation to the maturity of the crop when cut and in relation to the amount of weeds and cereal grains in the ensiled material. "Samples tested so far indicate a crude protein content ranging from 16.5 to 21 per cent on a moisture-free basis", Mr. Meston says.

Other observations and conclusions drawn by Mr. Meston are that:

. Production of actual protein per acre is considerably higher for fababeans than for other field and forage crops.

. Fababeans can be used either as a grain or as a forage. If the crop is frozen in early fall, it can be salvaged as a high protein forage without any adverse toxic properties.

. Fababean silage turns a blackish-brown immediately after being chopped. As it cures in the storage facility it takes on quite a pleasant smell.

. It is important that the chopped material be cut finely and that it be firmly packed to keep spoilage to a minimum. If possible the pits or mounds should be covered with polyethylene and/or a good layer of cereal straw, hay, etc.

. Fababeans, being a legume crop, do not require heavy fertilizer applications. Fifty or 60 pounds of 11-48-0 or 11-55-0 per acre are adequate in most areas.

. An average crop of fababeans will significantly condition most soils and increase their nitrogen level. Cereal or oilseed crops grown on fababean stubble will yield as well or better than those grown on adjacent or nearby summerfallow fields.

. Fababeans are a good nurse crop for alfalfa, clovers and grasses.

. It is very important that fababean seed be inoculated with a specific inoculent if the crop's natural ability of 'fixing' nitrogen from the air is to be enhanced. Since the bacteria is short lived when exposed to heat or direct sunlight, inoculated seed should be kept covered.

A Promising Forage Crop (cont'd)

. Extreme care must be exercised to prevent seed damage during the planting process. The travelling speed of the drill should be no more than three miles per hour. If possible the feed-cup gates should be lowered and the shaft openings widened to allow full flow of the seed.

. Weed control is essential for fababeans if maximum growth and yields are to be achieved. The crop can be harrowed as often as necessary until the seedlings reach a height of four or five inches. Specific herbicides have been found to be effective when applied in accordance with the manufacturer's directions. They include Carbyne and Avadex for wild oats; Treflan for wild oats and certain other weeds and Dinoseb and Tropotox for stinkweed, wild mustard, pigweed etc.

. Fababeans do not compete well with other plants, and should, therefore, be planted in a clean, well prepared seedbed.

. Fababeans are a good 'break' crop in crop rotation programs.

. It is advisable to leave fababeans, intended for silage, in the swath until the mass moisture drops to around 65 per cent, which, under good weather conditions, takes from two to five days. Fababean plants when first cut usually contain a high level of moisture.

. Production costs involved in growing fababeans are somewhat higher than those for cereals and other forage crops, mainly because of a higher seed outlay. However, because of the distinctive characteristics and advantages of fababeans, these higher costs are more or less offset.

"Fababeans", says Mr. Meston "are gradually being accepted by growers in Alberta, and as earlier and better yielding varieties become available, production will increase."

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October 11, 1976

FOR IMMEDIATE RELEASE

ELECTRICALLY CONTROLLED HYDRAULIC SYSTEM FOR A FARM TRUCK

Did you know that through the use of two electrically controlled valves and a large hydraulic pump it is possible to use the hydraulic system on an ordinary farm truck for many tasks besides simply dumping the grain box?

According to the inventor, John Kienholz of Alberta Agriculture's engineering field services branch, his electrically controlled hydraulic system can be used for operating such things as almost any type of mixer, including feed mixers; manure and fertilizer spreaders; post hole augers and the large augers used for transferring grain from the truck to the seed-drill as well as for tilting farm transport trailers.

He says the hydraulic hoist and auxiliary hydraulic equipment in the system he has designed can be operated from both the cab of the truck and the back of the grain box by simple toggle switches. The equipment could also be operated by remote control through the use of an extension cord with a toggle switch on the end.

Mr. Kienholz's hydraulic system also has a number of built-in safety features. One of these is a check valve which prevents the grain box from 'self-dumping' when the grain slides to the back of the box as the box is being raised.

The electrically controlled equipment can be used on any farm truck including a pick-up. Mr. Kienholz suggests that anyone who is planning to buy a new truck and who would like to install his equipment should order a truck without the conventional hydraulic pump and controls. The cost of the parts for Mr. Kienholz's equipment would be $350 to $500 more than the conventional hydraulic equipment.

Mr. Keinholz will be pleased to answer any questions on his invention and has a detailed schematic plan which shows exactly how to install the equipment. Entitled "Electrically Controlled Hydraulic System for a Farm Truck", the plan can be obtained, free of charge, from the Engineering Field Services Branch, Agriculture Building, 9718 - 107 Street, Edmonton T5K 2C8.

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October 11, 1976

FOR IMMEDIATE RELEASE

LIQUID SUPPLEMENT AND STRAW FOR BEEF COWS

by D. B. Karren
Alberta Agriculture's regional Livestock
Supervisor at Red Deer

Cereal straw has a tremendous potential for lowering winter feeding costs of beef cows. In fact, supplemented straw rations can reduce feed costs by as much as $20 per cow

Since straw is low in energy, protein, minerals, and vitamins, and because cows on a straw ration are able to consume less,they can't normally obtain enough nutrients from straw to maintain weight. Under mild winter conditions this is of little immediate concern, although it may lead to poorer breeding performance.

However, during cold winters, storms, or severe cold spells, the cow's appetite increases, and she consumes more straw than she is able to digest. The undigested straw is forced into the lower stomach where it remains undigested. This leads to impaction and death in a relatively short period. With properly supplemented straw rations, however, impaction should not be a problem.

Straw can be supplemented in several ways, one of which is a liquid supplement. Most liquid supplements contain molasses, non-protein nitrogen (urea), phosphorus, some minerals and vitamins. Some also have small amounts of other natural by-products. Basically, they are all formulated to provide protein, although they do supply some energy, minerals and vitamins. They are costly energy sources.

One pound of liquid supplement supplies about the same amount of energy as one pound of hay, but liquid supplements contain a higher amount of phosphorus than most feeds. This extra phosphorus can improve breeding performance. Most of the protein comes from

- (cont'd) -

Liquid Supplement And Straw For Beef Cows (cont'd)

non-protein nitrogen, mainly urea. Although urea-containing supplements do not usually give as good an animal performance as does natural protein, their low cost usually makes them economical. Reduced performance with urea is especially true in case of low energy rations.

Straw rations have to be supplemented with energy, protein, minerals and vitamins. Work at the University of Alberta, has shown that cows on a supplemented ration consumed about 1 1/2 pounds of straw per 100 pounds of body weight. The following table indicates the adequacy of a straw ration supplemented with only a liquid supplement.

	PROTEIN (lb/day)	ENERGY (mega-calories of digestible energy per day)
Nutrient requirements of a 1,000-lb. dry beef calf	1.4	18.0
Nutrient supplied by:		
- 15 lbs. barley straw	0.6	11.4
- 2.5 lbs. liquid protein supplement	0.8	2.5
TOTAL	1.4	13.9

Although the above ration might not give any immediate problems during mild weather, the cows would certainly lose weight because of insufficient energy in the ration. It is possible that insufficient energy over a prolonged period could result in lowered breeding performance as well.

The immediate danger of such a ration would be during cold weather. Cattle would consume extra straw and would require extra protein to aid in its digestion. Theoretically,

Liquid Supplement And Straw For Beef Cows (cont'd)

the extra protein would be available from the liquid supplement, but there could be some problems with this theory.

Liquid supplements are formulated so that they won't freeze in winter. Because they do not freeze, their temperature remains the same as that of the air. When the air temperature goes down to -20° C., the temperature of the liquid supplement also goes down to -20 °C. Hence, consumption of the liquid protein will decrease during colder weather. If consumption is lower during cold weather when straw consumption has increased, the impaction problem could be aggravated.

It is certainly safer, and probably just as economical, to supplement straw rations with a protein supplement and grain. The choice of the supplement should be made on (among other things) price. In most cases, liquid supplements cost more per pound than dry supplements, but they have been sold on the basis of their convenience when compared with dry supplements. This is true when they are fed as the total supplement, but when grain is going to be fed there is an advantage in using a dry supplement. A dry supplement is more convenient to mix with the grain. Feeding a dry supplement with grain will also give more control over the amount of supplement fed.

The following nutritionally adequate straw rations are given as examples only. Correct rations would be based on a nutrient analysis of the feeds and the actual consumption of straw.

	Ration 1 (pounds per day)	Ration 2 (pounds per day)	Ration 3 (pounds per day)
Hay	-	-	18.0
Barley Straw	15.0	15.0	-
Barley	3.5	3.5	-
Dry Supplement 32%	1.33	-	-
Liquid Supplement 32%	-	1.33	-
Cost per Day	39.5¢	41.0¢	55.0¢

October 11, 1976

FOR IMMEDIATE RELEASE

THE CHANGING REAL ESTATE MARKET IN ALBERTA

When land was used only for agriculture and the only type of user was the farmer, the market price of land reflected the present value of the future stream of income anticipated from the land by the prospective users.

However, today's buyers of rural real estate are different. The future incomes of many of these buyers are not based on the same length of time and/or dependence on the soil as those of the farmers. Hence, there is an increasing variance in rural land values which is being caused by the widening gap between various prime interests in the use of rural land.

At the present time there are indications that the mechanism of the real estate market does not effectively reflect the needs of the rural population. A study released by the Alberta Land Use Forum indicated that in about 90 per cent of all rural subdivision applications made in 1969, 1971 and 1973, the land was used for agriculture before subdivision. Over the three years, 180,000 acres were studied.

The intended uses of the subdivided land were 54.3 per cent for country-residential purposes and 4 per cent for resort purposes. A major concern in this regard is the inevitable loss of farmland through its dissection into increasingly smaller parcels until those parcels become too small to be economically viable for agricultural activities. Another concern is that land which is not subdivided may be held for speculation and may lie idle for many years. In areas of heavy speculation, the land values increase, making it difficult for farmers to consolidate and purchase land.

A study based on a 10 per cent random sample of rural land title transfers in Alberta in 1971-72 was recently conducted by Alberta Agriculture's resource economics

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The Changing Real Estate Market In Alberta (cont'd)

branch. "We found", says resource economist, Charles Pei, "that 88.2 per cent of the land had been farmed before sale and that 54.4 per cent had been farmed by the owners. The remaining 33.8 per cent had been farmed by renters."

Data received from land purchasers indicated that only 86.1 per cent of the land was farmed after sale. In this case 72.6 per cent was farmed by owners and 13.5 per cent by renters.

"Comparing the amount of land farmed before and after sale", says Mr. Pei, "we concluded that the difference of about 2 per cent (admittedly a tentative figure) represents the net conversion of land out of agricultural use during one year's transactions."

Non-agricultural land users have two major advantages over the farming community in bidding for land. First, their ability to pay is independent of the income from the land. Second, they usually require smaller parcels of land compared with farm operators. Under these circumstances, their total amount of finanacial commitment is relatively easier to handle than is that of the farm operator.

"Our study of rural land title transfers," Mr. Pei says, "also indicated that non-agricultural buyers of land are willing to buy at a price exceeding the ordinary income anticipated from agricultural use."

The table below shows the average value per acre of land and the use of the land after purchase. Notice that within the studied sample, prices paid for land for country residential purposes far outstrip those paid for agricultural land, and that the prices in the table are assurance fund values as recorded in the Land Titles Office. They should not be confused with the market values of the property.

The Changing Real Estate Market In Alberta (cont'd)

Rural Real Estate Values By Use Of The Purchaser

Current Use Of Land	Numbers Reported	Assurance Fund Value/Acre
1. Farming by Oneself	308	$ 113
2. Renting Out for Farming	69	146
3. Acreage for Summer Residence	7	232
4. Acreage for Year-round Residence	23	2557
5. Recreation	15	65
6. Others	5	46

With a large increase in Alberta's population projected for 1980, and with indications pointing toward a healthy future for diversified industry, users of agricultural land can expect more competition from other users whose incomes have no direct relation to the land.

"The basic question is not the political and socio-economic approach to retaining prime agricultural land, as has so often been voiced in public," Mr. Pei says. "It is the more fundamental issue of maintaining a suitable land base which is financially manageable by the farm operator. Prime land or poor land, there must be land parcels which efficient farmers can afford and from which they can make a living."

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FOR IMMEDIATE RELEASE

WINTER FOOD SUPPLIES FOR HONEYBEES

Although Alberta Agriculture's wintering assistance grant, which has been available to registered Alberta beekeepers for the past three years, has been discontinued, it seems that more, rather than fewer, beekeepers are planning to keep their bees over the winter.

Two reasons for this trend are the increasing cost of package bees and the fact that overwintered colonies are often strong enough to produce a honey crop under conditions that barely permit package bees to hold their own.

Dr. Ulf Soehngen, provincial apiarists, says food supplies required by an overwintering colony vary with the colony strength, whether it is to be wintered inside or outside and, to some extent, with the specific method of wintering that is used.

A food reserve of between 100 and 120 pounds of honey (not including the weight of the bees and hive) is generally recommended for a three-storey colony that is going to be wintered out of doors. Contrary to what some people may think, the honey is not lost because a hive that comes through the winter in good condition will often make up this volume from the spring honey flow alone.

Between 25 and 30 pounds of honey is usually adequate for a single storey colony wintered indoors because such colonies are usually smaller than those wintered outside. However, some supplementary feeding may be required in the spring.

The location of winter food supplies in relation to the location of the bee cluster in the hive, especially when the colonies are being wintered outside, is as important as the amount of food provided. Because individual bees that move away from the cluster die when the temperature is below about 7 ^{o} C., food supplies that are not available to the cluster as a whole are of little

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Winter Food Supplies For Honeybees (cont'd)

value to the bees until warmer temperatures permit the cluster to shift position or allow individual bees to move honey to the cluster.

Although the cluster does gradually move upwards and along the combs under normal winter conditions, and there is some movement across the frames, the bees almost never move down. Hence, strong colonies have actually starved while there was plenty of food below them.

The honey that is left in the hive for the winter should be in dark brood comb because bees rarely form a winter cluster on white comb. In cases where they are forced to do so, losses are nearly always high. According to the late Dr. C. L. Farrer, head of the United States Department of Agriculture's bee research laboratories, bees move on to full, dark combs more readily when at least several rows of cells are left empty along the bottom.

Despite research being carried out in various parts of Canada on the types of food most suitable for wintering honeybee colonies in northern areas, much remains to be done in this area. However, as a general rule, light honey is considered to be much more suitable for winter feed than dark honey or honeydew--the latter can be disasterous. Many beekeepers like to supplement their winter feed supplies (even in the case of colonies with adequate honey reserves) with beet or cane sugar, fed as a 60 per cent syrup (2 parts sugar to one part water). The bees eat the sugar before eating the honey.

Because sugar is nearly pure carbohydrate, it metabolizes to form heat, leaving very little or no indigestible residue in the intestines of the bees. Since bees normally store this residue in their intestines for the whole winter, having a period when virtually no residue collects is of considerable benefit to them. Five to 10 pounds of sugar given to each colony after the active season has

Winter Food Supplies For Honeybees (cont'd)

ceased will see the bees through the first few months of winter.

The addition of the antibiotics, Terramycin and Fumidil, to the winter feed of bees at the rate of half a teaspoonful of either to one gallon of syrup may help guard against American foulbrood and nosema disease. Terryamycin may also be fed dry by mixing one part Terramycin to 5 parts of icing sugar and spreading the mixture over the topbars near the front of the super containing the brood. However, once the bees form their winter cluster, this treatment is no longer effective.

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FOR IMMEDIATE RELEASE

FACTS ABOUT CHEESE

October is cheese month in Canada. Delicious versatile and convenient, cheese has always been one of man's favorite foods, and with good reason. Cheese is synonymous with the wholesomeness of milk and has the nutritional value of any high quality protein.

Although most of us enjoy eating cheese as a snack, in a main dish and for dessert, how many of us know that:

- the protein in one ounce of ripe cheese compares favorably with the protein in one cup of milk.
- cheese, like milk, is an excellent source of animal protein and calcium and is also a good source of riboflavin and vitamin A.
- an ounce of cheese can be substituted for an ounce of meat because cheese is 25 per cent protein by weight.
- a mild cheddar cheese has been aged for two to three months; a medium cheddar cheese has been aged for at least six months and an old or sharp cheddar has been aged from nine months to two years.
- cheese on which mold appears may still be used if the mold is trimmed off.
- most hard cheese can be frozen for up to six months if it is cut into pieces of not more than 1 pound and wrapped in moisture-proof freezer wrappers.
- unripened cheese, such as cottage or cream cheese, should be refrigerated in its own container and used soon after purchase (if frozen this type of cheese becomes watery and mealy).
- cheese should be cooked at a low temperature. High temperatures and prolonged cooking toughen cheese.

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Facts About Cheese (cont'd)

- cheese should be served at room temperature to bring out its full flavour.
- Alberta cheese plants manufacture more than 14 varieties of high quality cheese.
- Alberta cheese is produced by skilled craftsmen working under hygienically controlled conditions and using tested cheese-making techniques that often go back many generations .

A pamphlet entitled "Alberta Cheese" has been compiled by the Alberta Dairymen's Association and Alberta Agriculture to help people select, prepare and store cheese. It also contains a reference guide to all the varieties of cheese that are produced in Alberta.

"Alberta Cheese" is available from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton T5K 2C8.

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AGRI-NEWS

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FOR IMMEDIATE RELEASE

INTERESTING RESULTS FROM REGIONAL FORAGE VARIETY TEST PLOTS

Larry Gareau, forage crop specialist with Alberta Agriculture, holding the forage plot harvestor which is used for measuring yields in the varietal test trials that are being conducted at Glendon in the municipal district of Bonnyville.

Is the information on new forage crop varieties released by research institutions always accurate at the local level? There are some who think that this is not the case.

Both farmers and extension personnel say that the results reported by research institutions are often difficult to apply to the farm situation because they have been obtained under somewhat controlled conditions which cannot be easily duplicated on the farm.

To overcome this problem Alberta Agriculture's field crops branch, in co-operation with the University of Alberta and the Alberta Horticultural Research Center at Brooks, has been promoting forage crop variety testing projects for several years. There are now 10 of these projects going on in various parts of the province.

The main objective of the tests is to obtain factual information on the local adaptation and performance of new species and varieties of forage crops grown under

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Forage Interesting Results From Regional/Variety Test Plots (cont'd)

field conditions and cultural practices that resemble as closely as possible those used by local farmers.

G. M. Gilland, district agriculturist at Smoky Lake, summed up his impression of the test plot at Glendon in the municipal district of Bonnyville, where 53 different grass and legume varieties are being tested, in the following words:

"As I have often suspected many of the species and varietal recommendations may be slightly 'a-wack' for this area. These plots will certainly be a big help in clarifying this type of information. Admittedly the plots may lack the ultimate in scientific research techniques presently employed by research institutions, but those used here more closely duplicate the techniques used by producers in the area. For that reason the data may be more valid than that provided by research institutions."

A second plot seeded last summer beside the first is already providing information related to differences of yearly climatic conditions. A third, intended to be seeded next summer, will round out the project at this site and should provide a wealth of data that is being requested by farmers in the immediate area. However, to get the most from these plots, which are expected to continue to provide information on such things as winter survival, persistence, longevity and total yield for two or three more years, the value of personal observation cannot be overstressed.

Reported yield data are fine, but their interpretation by the farmer on the land and by his local district agriculturist is made much easier when the varieties can be seen growing and when the conditions under which they are handled can also be observed first hand.

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Alberta

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COMMUNICATIONS

October 18, 1976

FOR IMMEDIATE RELEASE

A NEW WARBLE CONTROL PRODUCT

Have you heard of Tiguvon Spotton? It is a new warble control product that came on the market late last year.

According to Michael Dolinski, pest control specialist and entomologist with Alberta Agriculture,the main difference between Tiguvon Spotton and the other systemics that are used for warble control is its method of application. It is applied with a gun-type applicator which squirts measured dosages of the chemical in one spot on the animal's back. From this spot the chemical is absorbed into the blood stream and will kill warbles anywhere in the animal's system.

As with the other systemics, dosages of Tiguvon vary with the weight of the animal being treated. The limitations on its use are also the same as those for the other systemics except that the wait period between the time the animal is treated and the time it is slaughtered, the time it freshens, the time the milk is used for human consumption, etc. is longer than that for any of the other systemics.

The cost of this method of warble control is about the same as that for the other application methods, except for the cost of the applicator which includes a holster for the gun and a belt-attached pouch for the Tiguvon bottle. Its cost varies between $10 and $15.

However, the fact that there is no waste with this applicator and the speed and ease with which the treatment can be carried out, makes Tiguvon Spotton extremely attractive for warble control treatment.

Squeeze-a-spot is another type of applicator for Tiguvon. It screws on to the top of a Tiguvon bottle and costs under a dollar. When the bottle is squeezed, the chemical is forced into the applicator which is calibrated in millilitres. To apply the

- (cont'd) -

A New Warble Control Product (cont'd)

chemical, you simply tip the contents from the applicator on to a spot on the animal's back. The cost per animal treated is the same as that for the gun-type applicator.

Mr. Dolinski recommends the squeeze-a-spot applicator for people with only a few head of cattle to treat and who do not want to buy a gun-type applicator.

Before using Tiguvon be sure to read the manufacturer's instructions on its use.

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FOR IMMEDIATE RELEASE

CARE OF FOALS

How many of you have noticed that horses in Western Canada tend to be smaller than their American counterparts?

Doug Milligan, head of Alberta Agriculture's Horse Industry Branch, believes that, as a general rule, our horses are smaller than American horses of the same breeds because of restricted growth during their first year of life. "If you look at the optimum growth curve for horses," he says, "you will find that foals at birth, at six months of age and at 12 months of age should be 10, 45, and 65 per cent respectively of their mature weight." Hence, a horse with the genetic potential to weight 1,100 pounds, should weigh about 110 pounds at birth, 500 pounds at six months of age and 700 pounds at a year old.

Their growth in height is even more dramatic. "A horse reaches about 70 per cent of its mature height in its first year, "Dr. Milligan says.

Among horse producing areas of the world, ours is unique because of its severe climatic conditions during the winter. For this reason there is little published information on raising horses under our climatic conditions. "It may be," says Dr. Milligan, "that we should be using special management techniques under such conditions. Our nutritional problems occur mainly because of our short grazing season, severe winters and unsatisfactory adjustments in foal management."

In Western Canada pastures mature in late July, after which the forage rapidly loses its nutritional quality to the point where it no longer provides sufficient nutrients for optimum growth of the foal or supports adequate milk production in the mare. Two solutions to this situation are to creep feed the foal or to wean it early.

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Care Of Foals (cont'd)

Creep feeding entails proving the foal with a high energy, high protein supplement on a free choice basis. You can place a creep feeder in a small pen with an opening that is just large enough for the foal to pass through. You should feed either a commercial foal ration or a specially prepared grain mix.

A foal ration should contain a minimum of 14 per cent protein, 65 per cent total digestible nutrients, 0.7 per cent calcium, 0.5 per cent phosphorus and vitamins A and D. Once a foal is used to eating from a creep, it can be weaned any time after three months of age with little or no setback in its growth.

Dr. Milligan reports that foals at the Olds College were eating approximately 6 pounds of creep feed a day, prior to being weaned at the beginning of September. After weaning, the foal can be fed as much concentrate as it can eat plus a limited amount of good quality hay. The recommended ration for foals weighing 500 pounds is 6 pounds of foal ration plus 6 to 8 pounds of hay (eg. alfalfa-brome) a day. This ration is designed to maintain a one pound rate of gain a day.

You should always keep your foal in a separate area from that used by older horses because foals require more feed and do not compete well with older horses. The foal should be protected from moisture and wind and always have access to water. A properly constructed overhead shelter and a heated water bowl are recommended. Because a foal requires a considerable amount of exercise, outdoor housing is preferable to indoor stabling.

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October 18, 1976

FOR IMMEDIATE RELEASE

1976 SUMMER FARM EMPLOYMENT PROGRAM

Approximately 1,100 Alberta students obtained farm employment this year under Alberta Agriculture's Summer Farm Employment Program.

The objective of the program is to provide farmers with summer labor and to provide the youth with farm work experience. Under the program the government pays one half of the employee's salary up to a maximum of $200 a month. The farmer who hires a student is expected to make every reasonable effort to provide him with a variety of farm tasks so that he becomes familiar with general farming operations.

During the past three summers that the program has been in operation, over 100 students suffered injuries during their term of employment. However, this year there were only four accident reports, three of which were of a very minor nature. Personnel involved in running the program feel that the safety information and seminars that were provided this year certainly played a part in the drop in the accident rate. They had a very beneficial effect on the attitude of the students towards farm safety.

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October 18, 1976

FOR IMMEDIATE RELEASE

EXCELLENT RESPONSE TO FARM ACCIDENT SURVEY

The response to interviews carried out under Alberta Agriculture's farm accident monitoring system has surpassed all expectations, according to Solomon Kyeremanteng, research officer in charge of the monitoring system.

The interviews commenced at the end of June in selected areas of the province and will continue at least until next summer. At their conclusion the results will be evaluated and a decision made on whether or not this monitoring system should be continued on a province-wide basis. Its objectives are to define the farm accident problem in Alberta, to identify the risk factors associated with farming, to determine the point of concentration for accident prevention programs and to establish a basis against which future accident trends can be measured and preventative programs evaluated.

Under the present monitoring system accident victims or their relations are interviewed to find out the specific cause and details of the accident. Mr. Kyeremanteng says, "Almost all the 100 or so people interviewed so far were most co-operative in giving all the information requested."

He also reports that a considerable amount of time is spent after each interview in discussing ways in which the accident could have been prevented. "Often ideas are generated through these discussions which can be incorporated into future accident prevention programs," he says.

The model for the present monitoring system was recommended by the Interdepartmental Committee on Occupational Safety in Agriculture. Government and private agencies agreed earlier this spring that a good farm accident data collecting system was badly needed. At the present time it is extremely difficult to obtain meaningful statistics on farm accidents and the hazards associated with farming are not really known.

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Excellent Response To Farm Accident Survey (cont'd)

Despite the fact that farming is reported to be the third most dangerous occupation in North America, little or no work has been done in the past to provide meaningful statistics on farm accidents in Alberta. Results carried out by Alberta Agriculture's farm development division last year showed that a considerable number of people are injured on farms in this province every year and that there is an urgent need for a thorough, continuing farm accident reporting system in the province.

Preliminary results from the present survey are expected at the end of this year.

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FOR IMMEDIATE RELEASE

PURCHASING SEASONAL MACHINES AND REPAIR PARTS

Make sure your machinery is ready to go when you are!

If you are planning to buy new tillage or seeding equipment for next spring's delivery, you should start shopping around now. Bob McFadyen, administrator of Alberta Agriculture's Farm Implement Act, points out that dealers selling farm implements will be in a much better position to supply the equipment you want if you contact them well in advance of the time you will need it. He recommends that you complete a contract with the dealer now with respect to the type of machine you want, the price of the machine, the trade-in allowance you will receive and the date on which you want the new machine delivered.

Mr. McFadyen also recommends ordering repair parts for your field implements now, while the troubles you encountered during the past harvesting season are still fresh in your mind.

By ordering your repairs early, you enable your farm equipment dealer to serve you more efficiently. You also allow him to get the parts you need for next year at the best possible price.

If you encounter problems in obtaining repair parts for your machinery, contact the Farm Implement Act Administration, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

BRITISH MAGNETIZED SEED TRIALS

The Northumberland College of Agriculture at Ponteland, England, has reported a yield increase of between 5 and 7 per cent in their first year of trials with magnetized barley seed.

In the trial, half a 20-acre field was sown with Midas barley which had been passed through a magnetized field. It was compared with non-magnetized barley sown in the other half of the field.

Although pleased with the results of this one year trial, Philip Blake, principal of the college, prefers to wait for the results of several years of trials before committing himself. "We are happy to report that the magnetized seed has shown an improvement in yield, but we prefer to continue with this operation for some years", he says.

According to information received by Alberta Agriculture, the idea for the experiment came from a similar type of experiment in Alberta which Mr. Blake saw while on a visit here. His method of magnetizing the seed is to create a magnetic field by using outer casing and field windings of a tractor dynamo and passing a 12 volt DC current at two amps through the windings. The grain runs down a hopper and through the magnetic field at approximately four minutes per 50 kilograms.

One reason for Mr. Blake's caution has been the exceptionally dry summer which may have considerably affected the growth of the barley. Also, some of the unmagnetized barley became lodged. Mr. Blake feels that soil conditions could also have affected the results because the field varies from being sandy in some places to a medium loam in others. The unmagnetized section also had more weeds.

"Inspite of all these factors", says Mr. Blake, "there is an obvious increase in the grain content of the magnetized barley."

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FOR IMMEDIATE RELEASE

PUMPKIN RECIPES

by Betty Birch
Alberta Agriculture's District
Home Economist at Stettler

It's getting close to the Halloween season -- the time when almost every home will have a jack-o-lantern. But do you always use the inside of your pumpkin?

Nothing is more delicious than pumpkin pie to a North American, but in other countries pumpkins are used for puddings, soups and vegetable dishes. They can be cooked like any other winter squash when used as a vegetable.

One cup of pumpkin has more calcium than a cup of milk. Pumpkin is also an excellent source of vitamin A and a relatively good source of vitamin C. And one cup of pumpkin contains only 75 calories!

To prepare a pumpkin for cooking wash it and then cut it in half crosswise. Remove the seeds and strings and put it in a saucepan, shell side up.

Bake the pumpkin in 325° F. oven for an hour or more, depending upon its size. It is cooked when it is tender and beginning to fall apart. Scrape the pulp out of the shell and put it through a ricer or strainer.

Now you're set to try all sorts of delicious pumpkin recipes.

Why not make pumpkin cookies for Halloween treats this year instead of giving out candy?

Pumpkin Cookies

1/2 cup shortening
1 1/4 cups brown sugar
2 eggs
1 cup cooked or canned pumpkin
2 cups sifted all-purpose flour
2 teaspoons baking powder
1 teaspoon salt
1/2 teaspoon ginger
1 teaspoon nutmeg
1 teaspoon cinnamon
1 cup seedless raisins
1/2 cup chopped nuts

Cream shortening and sugar. Beat in eggs, one at a time, add pumpkin and beat until smooth. Sift dry ingredients, add raisins and nuts and stir into pumpkin mixture.

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Pumpkin Recipes (cont'd)

Drop by teaspoons on greased cookie sheets and bake 12 to 15 minutes at 350 ^{o} F.

This recipe makes about five dozen cookies.

Pumpkin Chiffon Pie

1 envelope gelatin (1 Tablespoon)	1 1/4 cups cooked or canned pumpkin
1/2 cup brown sugar	3 egg yolks
1/2 teaspoon salt	1/2 cup milk
1/2 teaspoon cinnamon	3 egg whites
1/2 teaspoon ginger	1/4 teaspoon cream of tartar
1/2 teaspoon nutmeg	1/2 cup brown sugar
1/8 teaspoon cloves	1 baked nine-inch pie shell

Mix gelatin, 1/2 cup sugar and salt and spices. Beat in pumpkin, egg yolks and milk. Bring to boil over medium heat, stirring constantly. Chill until slightly thickened, stirring occasionally. Beat egg whites and cream of tartar until soft peaks form. Gradually beat in remaining 1/2 cup sugar until stiff. Then fold into pumpkin mixture. Pour into pie shell and chill until firm (about 3 hours).

This recipe makes six servings.

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FOR IMMEDIATE RELEASE

ASSISTANT FARMERS' ADVOCATE APPOINTED

The farmers' advocate of Alberta, Helmut P. Entrup, has announced the appointment of Jay Leddy as his assistant. The appointment becomes effective on November 1, 1976.

Mr. Leddy will assist Mr. Entrup with problems and complaints received from farmers which arise from the action of parties other than the government and its agencies. However, they include all matters pertaining to individuals versus rural municipalities.

Mr. Leddy was born in Tisdale, Saskatchewan. Upon graduation from Campion College, Regina, in 1948, he spent two years with the Prairie Farm Rehabilitation Association. He then joined Socony (now Mobile Oil of Canada) as a surveyor/landman and worked for two years in rural Alberta.

In 1952 he joined radio station CHAB in Moose Jaw, Saskatchewan, as an announcer. Mr. Leddy spent the next 20 years working with rural oriented stations in a variety of positions.

In 1972 he entered the rural development field as general manager of Norman Regional Development Corporation at Thompson, Manitoba. Two years later he joined Alberta Agriculture as a development officer.

Mr. Leddy's background in communications and rural development have given him wide contact, individually and collectively, with the agricultural community.

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October 18, 1976

FOR IMMEDIATE RELEASE

ENGINEERING APPOINTMENT

G. L. Calver, associate director of Alberta Agriculture's farm development division, has announced the appointment of Wayne Ulrich to the position of head of the engineering field services branch.

In his new position Mr. Ulrich will supervise the activities of the regional engineers, the engineering specialists and the engineering technologists. These people provide agricultural engineering services and information to departmental personnel in the areas of farm structures, water and sewage disposal, animal waste management and farm machinery as well as to farmers.

Mr. Ulrich was raised on a farm in the Saskatoon district, and obtained his B. Sc. from the University of Saskatchewan in 1961. His field of specialization was civil engineering.

After graduation he joined Stock Keith and Associates, consulting engineers in Regina, where he supervised the construction of water and sewage projects. From 1962 to 1963 he worked with Alberta Agriculture as assistant agricultural engineer in Calgary.

The following year he joined Logger Lumber Ltd. in Calgary where he was manager of farm building construction. Here he was responsible for the design, sales and production of a variety of farm buildings.

In 1966 Mr. Ulrich moved to Toronto where he spent two years with Plywood Manufacturers of B. C. He was technical assistant to the builders, architects and engineers involved in engineering materials courses at the main universities in Ontario.

Since 1968 until his present appointment, Mr. Ulrich has been running his own large mixed farm near Saskatoon and doing agricultural consulting work.

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AGRI-NEWS

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CANADIANA

October 25, 1976

FOR IMMEDIATE RELEASE

THIS WEEK

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October 25, 1976

FOR IMMEDIATE RELEASE

FORAGE SITUATION IN ALBERTA

This was not a good year for hay production in Alberta.

According to F. A. Boyce, statistician with Alberta Agriculture, below normal precipitation in most areas of the province during the winter and a dry spring resulted in slow forage growth. He reports that yields from the first hay crop were well below the long time average, but that generous summer rains gave excellent second cuts in many areas.

However, total hay production for the province is estimated at 5.5 million tons, a reduction of 300,000 tons compared with last year. Because of the tight forage situation, it is anticipated that the volume of alfalfa for processing during the winter may be limited,and that carryover stocks for next year will be low. Hay shortages have already been reported in some areas where yields were poor or substantial losses were sustained from adverse weather.

"Areas of particular concern from the point of view of short hay supplies," says Mr. Boyce, " include the Peace River region and the Rimbey-Wetaskiwin area where both the quality and the quantity of hay is lacking".

Large quantities of straw are available this year throughout the province, but the low nutritional value of this feed limits the amount that can be substituted for hay without supplementation by grain, dehydrated alfalfa or other supplements.

"The weather", Mr. Boyce says, "is going to be the determining factor in whether or not cattlemen have problems in overwintering their stock". If the fall is open and the winter mild, livestock producers in all areas of the province should have little difficulty in maintaining their animals in good condition. A long, severe winter, on the other hand, could have a serious effect on the viability of many livestock operations.

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October 25, 1976

FOR IMMEDIATE RELEASE

PREGNANCY TESTING

by Dr. F. P. Baker
Extension Veterinarian
Alberta Agriculture

Pregnancy testing is a moneymaker!

With the current depressed cattle prices, many beef producers tend to view any veterinary procedure as an expense to be avoided. However, there is one thing that a veterinarian can do for his client that has been proved to put money into his pocket. That is pregnancy testing his cows in the fall, before winter feeding begins.

Every farmer knows that it costs a lot of money to feed a cow during the winter months, and with the poor supply of hay this year, feed costs are going to be even higher.

To feed a dry cow unnecessarily during the winter months is indicative of poor management. It is not necessary to feed any dry cow because of doubts about whether or not she is pregnant. Palpation of the uterus through the cow's rectum by a competent veterinarian can determine which cows are pregnant and which ones are dry and should be shipped.

Consider the cold economic facts.

Fees for pregnancy testing vary among veterinarians, but the average fee seems to be $1 to $1.50 per head. It will cost at least $70 to overwinter a cow. If she is dry, this money will have been wasted. Even at a cost of $2 per head for pregnancy testing, a saving of $68 will have been realized if the cow is shipped.

"Yes" you might say, "but what about the $2 per head paid for those that

- (cont'd) -

Pregnancy Testing (cont'd)

are pregnant. There's no profit on those". Let's suppose 100 cows are tested and 10 per cent of them are dry, which is well above the average pregnancy rate on most farms and ranches. Culling those 10 cows will result in a saving of $600 in feed costs. Subtract from this figure the cost of pregnancy testing all of the cows ($200) and there is a saving of $400.

Add to this the advantages of the early detection of such diseases as vibriosis, an early appraisal of the preceding season's breeding management, and the peace of mind of knowing that all's well. Even if there are no dry cows, it's easy to see that pregnancy testing is one of the best investments a farmer or rancher can make.

A minimum of facilities are required for pregnancy testing; facilities that should already be on any well managed farm or ranch. A sturdy chute with a squeeze at the end for the rectal palpation of individual animals is all that's needed.

A gate in the side of the chute immediately behind the squeeze for the easy passage of the veterinarian is much appreciated by him and greatly speeds up his work. Some veterinarians charge by the hour instead of per cow, and the better the facilities, the sooner the job will be done.

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October 25, 1976

FOR IMMEDIATE RELEASE

ALFALFA-RELATED BREEDING PROBLEMS IN DAIRY HERDS

by D. B. Karren
Alberta Agriculture's Regional
Livestock Supervisor at Red Deer

Alfalfa is an excellent roughage for dairy cattle and can reduce feed costs. However, because of a mineral imbalance, its use without proper mineral supplementation can lead to poor breeding performance.

Reproductive performance is economically important to the dairy farmer. Analysis of record of performance (ROP) data for dairy cattle has shown that the average cow enrolled in ROP has a calving interval of 404 days. In an Ontario study, with excellent management, this interval was lowered to 362 days, a difference of 42 days. The study showed that these 42 days, in terms of lost milk returns, extra feed and labor, represented up to $75 per cow per year in herds producing less than 12,000 pounds of milk annually.

Long intervals between calvings are a result of the cows not being settled quickly enough after calving. Some of the causes are silent heats, irregular heat periods, a reduced number of heat periods, and reduced conception rates. Among the many factors which influence reproductive performance is nutrition. Many nutrients are involved, but phosphorus is one of the more important ones.

Alfalfa hay is higher in calcium than grain, but it is lower than grain and oilseeds in phosphorus. Although alfalfa-based rations are borderline to adequate in phosphorus levels, their excessive level of calcium impedes phosphorus absorption, with the result that a phosphorus deficiency can result.

Phosphorus is required by dairy cows in daily defined amounts, and the amount

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Alfalfa-Related Breeding Problems In Dairy Herds (cont'd)

required depends upon the age of the cow, her size, stage of pregnancy, level of milk production and the amount of calcium and vitamin D present in her diet. Vitamin D aids the absorption of phosphorus from the intestine.

A large number of good dairy producers trying to make changes in their management to reduce costs are experiencing breeding problems in their herds and quite often these problems are encountered in their best cows. Many of the practices the dairymen have adopted can actually aggravate an already low roughage phosphorus level. Such practices are:

- the increased use of silage with a low vitamin D content (because of limited sun curing).
- the feeding of less grain and more roughage per pound of milk produced.
- increasing herd production which increases phosphorus requirements.
- the increased use of barns, thereby reducing exposure of the herd to sunlight which results in less vitamin D being produced by the cows.
- the increased use of alfalfa increases the amount of calcium in the ration.
- the continued use with mainly legume roughage of complete supplements and mineral mixes which are formulated for grass roughage.

When the breeding problem is related to phosphorus, improvement can be made by changing the mineral feeding program. The first step is to balance the minerals with the roughage being fed. For a typical grass roughage ration, the ratio of calcium to phosphorus in the mineral mix should be 2 parts of calcium to one part of phosphorus. However, if legumes make up the major portion of the roughage, there will be an excess of calcium and the mineral mix should contain none or very little calcium. If a commercial complete supplement is used with legume roughage, it should contain no calcium (limestone).

Alfalfa-Related Breeding Problems In Dairy Herds (cont'd)

The best mineral feeding program is one in which the mineral mix is included in the grain mix. The level at which it is included will depend upon the level of calcium and phosphorus in the mineral mix, the grain mix and the roughage. Minerals should also be fed free-choice and vitamin D should be added to the feed or given by injection.

October 25, 1976

FOR IMMEDIATE RELEASE

GOVERNMENT ASSISTANCE FOR PROCESSING PLANT

"Walker's Meats and Processing Ltd. is an excellent example of the type of project assisted under the Canada-Alberta Nutritive Processing Agreement".

This statement was made at the plant's official opening in Stettler by R. G. McCullough, Alberta director-general of the federal Department of Regional Economic Expansion (DREE).

Walker's Meats and Processing Ltd., which will employ nine people when its new plant is operating a full capacity, has received a grant of $12,674. Equally shared by DREE and Alberta Agriculture, the grant is based on 15 per cent of the estimated total capital requirements of the new facility.

"The governments of Canada and Alberta have recognized the need to create job opportunities locally around existing resources", Mr. McCullough said. "This has resulted in the Nutritive Processing Agreement, which is designed to encourage the establishment of nutritive processing facilities in rural Alberta.

"Stettler is in the heartland of Alberta's mixed farming community, and Mr. Walker has been in the meat processing business for 21 years. He is an experienced manager and a respected member of the community.

"Since the present project meets government objectives and provides a needed service in the community of Stettler, development assistance has been offered."

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October 25, 1976

FOR IMMEDIATE RELEASE

WINTER FEEDING HORSES

A mature horse can withstand our harsh winters well as long as it is healthy, has a balanced ration and protection from wind and moisture. Both wind and snow severely reduce the insulation value of a horse's winter coat and cause severe stress.

Although a horse should never be allowed to become obese, it should start the winter with some surplus flesh. This excess flesh provides insulation against the cold and gives the horse a reserve of energy on which to draw during very cold weather. It is also important that a horse starts the winter free of such parasites as worms, ticks and lice. These can reduce its ability to grow a protective coat of hair and decrease its utilization of feed.

According to Doug Milligan, head of Alberta Agriculture's horse industry branch, horses start aclimatizing themselves for winter in the early fall by growing a winter coat and by gearing up their metabolism for the quick production of energy. Once aclimatized, horses are subject to heat stress when worked hard in a warm area. If a horse is kept inside during the fall and winter, the aclimatization process is slower.

Even though trees and three-sided shelters considerably reduce feed requirements, a horse still needs 20 to 40 per cent more feed during cold weather (below -10 ^{o} C.) than it needs during warm weather.

"Diets for wintering mature horses can be simple", Mr. Milligan says. "A horse that is not working needs 16 to 20 pounds of good hay a day, supplemental vitamin A (30,000 I.U./day), minerals (free choice calcium and phosphorus) and water." Once a day feeding is adequate.

Yearlings, two-year olds and pregnant mares (during the last 90 days of pregnancy) may require 4 to 6 pounds of oats or an oat-barley mixture. Since most horses

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Winter Feeding Horses (cont'd)

will eat more hay than they need, the amount they receive should be restricted.

Deciding what hay to purchase is one of the most difficult aspects of feeding horses during the winter because of the tremendous variation in the quality of hay. Mr. Milligan believes that good quality hay can solve many feeding problems.

"When buying hay by the bale", he says, "be aware of its weight." If you pay $2 for a 40, 60, or 80-pound bale, you are paying $100, $67 and $50 per ton respectively. In other words, you would be paying twice as much for the 40-pound bale as you would be paying for the 80-pound bale.

As a general rule a top quality hay is a better buy than a low quality hay because of its higher nutritional value and the fact that there is less waste. Good quality alfalfa at $80 per ton, for example, is a better buy than average quality timothy at $70 per ton.

Mr. Milligan recommends paying attention to the following points when evaluating the quality of hay.

- Type of Forage - Types of forage vary in descending order of quality from alfalfa, bromegrass, timothy, crested wheat grass, oat hay, Prairie hay and slough hay down to straw.
- Leaf-stem Ratio-The leaves in hay are very nutritious, but most stems are low in quality. As hay matures, the proportion of stems to leaves increases and the quality of the feed decreases.
- Moisture Content - New hay that feels moist or warm in the centre of a bale is too wet. There is a risk of mold and spoilage.
- Mold and Mustiness - Hay that looks or smells moldy or musty should not be fed to horses.
- Color - The greener the hay the better. Its color gives an indication of the maturity of the hay and whether or not it has deteriorated through weathering. Brown hay has been badly weathered and will be of poor quality.
- Weeds - Avoid weedy hay. Weeds contain a low level of nutrition and are often discarded by horses.

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Winter Feeding Horses (cont'd)

You can obtain an analysis of the nutrient content of your hay by sending a representative sample to the Alberta Soil and Feed Testing Laboratory, O.S. Longman Building, 6909 - 116 Street, Edmonton, T6H 4P2.

Further information on horse management, including diet, can be obtained from the Horse Industry Branch, 2003 McKnight Boulevard Calgary, T2E 6L2.

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October 25, 1976

FOR IMMEDIATE RELEASE

PURCHASING TOPSOIL

There are a number of precautions that a person should take when buying topsoil to ensure that it has desirable physical and chemical characteristics. Often the only way of ensuring its suitability for a garden is to make an on-the-site inspection of the field where it is being loaded.

A medium-textured soil (loam) which contains approximately equal parts of sand, silt and clay is the most desirable type of soil for landscaping and general gardening purposes. You can make a rough estimate of soil texture by wetting a small handful of soil with water and rubbing it between your forefinger and thumb. A gritty feel denotes the sand particles in the soil, which do not break down when wet. A soapy or silky feeling indicates the presence of intermediate-sized silt particles, while a sticky feeling indicates fine clay particles which adhere to each other.

A loam soil has each of the above characteristics as opposed to a sandy soil which would be very gritty and a heavy clay soil which would be very sticky and have no gritty particles.

In a desirable topsoil the clods (lumps) break down easily into granular or crumb-like aggregates when squeezed in the hand. Large compact lumps of soil could indicate that the soil was stripped too deeply with the result that heavy subsoil material is mixed with the topsoil.

The color of soil is an indication of the kind and amount of organic matter it contains. Black soils have a high organic matter content, while a light grey soil has a low organic matter content.

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Purchasing Topsoil (cont'd)

Organic materials like peat moss, manure and compost can be added to the topsoil in a garden to increase its porosity and its general physical condition. In fact, one of these organic materials can often be used instead of adding new topsoil.

White crystals on the surface of dry soil particles usually indicate the presence of free salts in the soil. When present in high concentrations, such salts can be harmful to plants. Since, an excess of salts in a load of topsoil will not be visible until the soil has had time to dry, it is a good idea to check for salt crusting in the field from which the topsoil is being obtained before you arrange to purchase the soil.

On-the-site inspection of the field from which topsoil is being stripped is also important to find out the types of weeds present. When topsoil is stripped from land close to an urban centre, it may contain undesirable weeds and weed seeds because the fields have often been abandoned or poorly managed for a number of years prior to being stripped. Perennial grasses like quackgrass can cause serious problems if imported into a garden with a load of topsoil. Annual grasses and broadleaf weeds pose less of a problem.

Arlene Chesney, horticultural specialist with Alberta Agriculture, advises anyone purchasing topsoil to contact a reputable dealer who has proved his reliability through customer satisfaction. The imposition of more stringent laws restricting the stripping of topsoil from agricultural land often results in a low quality topsoil being offered for sale. However, a reliable dealer is usually willing to tell you the location of the field where he is loading his topsoil. You can then inspect the field before you decide to purchase the soil.

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October 25, 1976

FOR IMMEDIATE RELEASE

UNIQUE ALBERTA EXHIBIT FOR EASTERN CANADA

Alberta's unique exhibit of rapeseed oil and honey at the International Salon of Food and Agriculture in Montreal and at the Royal Winter Fair in Toronto in November is expected to draw a combined crowd of at least 500,000.

The exhibit, to be known as the Alberta Glass Garden, will be at the International Salon of Food and Agriculture from November 2 - 7 and at the Royal Agricultural Winter Fair from November 12 - 20. On November 1 the Alberta delegation will take part in a parade that is scheduled for downtown Montreal. Their exhibit will consist of a large combine, representing rapeseed harvesting, and a float depicting honey extracting.

The Alberta Glass Garden, covering 1,200 square feet and raised eight inches off the ground, is unique in that, in addition to the conventional vertical displays, it makes use of 14 floor 'wells' to get its message across. The floor 'wells' will be 4 by 4 feet and covered with a glass top. Each well will be lit by fluorescent lights and will feature such exhibits as rapeseed plants growing, honeycomb frames, containers showing various types of honey, large dried bees on model flowers, a model restaurant table setting with rapeseed oil and honey products, rapeseed meal for livestock and poultry and so on.

The five vertical displays in the glass garden will include a 14-foot high, six-sided kiosk featuring giant photographs of the rapeseed and honey industries plus packages of the processed products. These will include various types of honey, rapeseed oil, margarines, salad dressings, shortenings and mayonnaise. This kiosk will have an illuminated revolving top displaying advertisements for the Alberta exhibit.

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Unique Alberta Exhibit For Eastern Canada (cont'd)

The other vertical displays will be a giant beehive featuring live bees working on a honey frame, an audio-visual unit featuring slides depicting the rapeseed and honey industries and a sampling booth with give-away items like shirt stickers, recipes and product literature. Here an automatic donut machine will make miniature donuts, deep-fried in rapeseed oil and glazed with honey, for handing out to visitors. The machine makes 1,800 donuts per hour.

The fifth display will be an electronic board which answers questions on rapeseed products. This display will also illustrate pictorially the various stages raw rapeseed goes through in a processing plant, and will show the end product derived from one bushel of rapeseed.

The Alberta exhibit is the result of a joint effort on the part of Alberta beekeepers, Alberta rapeseed growers and Alberta Agriculture. The promotion is being co-chaired by Gay Thompson and Brian Hodge of Alberta Agriculture.

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October 25, 1976

FOR IMMEDIATE RELEASE

TWO NEW PIECES OF POULTRY EQUIPMENT

A reostat on the electrical system and a solenoid valve in the water line are two innovations used in poultry production that are relatively simple but extremely practical, says Gordon Johnson of Alberta Agriculture's poultry branch.

The reostat or dimmer allows the operator to turn the lights in his poultry house up while he is in the house and down again when he goes out. The device is equally useful for broilers, layers and turkeys.

For many years poultry producers have been aware that light has a profound effect on poultry. As artificial light took over from the natural light provided by the many-windowed, traditional poultry house, it became evident that the length of time that the birds were exposed to light was more important than the actual intensity of the light.

The windowless houses that followed the multiple-windowed buildings often featured rows of high wattage incandescent or flourescent lights. However, this type of lighting caused featherpicking, cannibalism, hysteria, increased mortality and decreased performance.

The obvious conclusion was to use dimmer lights. Many tests have been run in an attempt to determine just how dim the lights can go without interfering with the performance of the birds. "It now seems that poultry need just enough light to find their feeders and waterers," says Mr. Johnson, "This is one, and perhaps only half, a foot-candle at bird level."

The first impression one has on entering a poultry house with this light intensity is that the house is completely dark, particularly on a bright, sunny day. How-

- (cont'd) -

Two New Pieces Of Poultry Equipment (cont'd)

ever, the low light intensity makes the birds more docile, and many poultrymen find that there is no need to debeak them.

The one big drawback to this low light intensity is that the poultryman cannot properly supervise his flock. He cannot, for example, spot water or feeder problems, signs of disease or a dead bird. Hence, many poultry producers are installing reostats. An added benefit of the reostat is that the birds become used to the lights going up and down in intensity, with the result that they do not react so violently to a brief power failure.

The solenoid valve, which is controlled by a time clock, shuts off the water in the poultry house at night. It seems that the most common time for floods to occur is during the night. Because there is no supervision at that time, floods are usually more serious than during the day. Apart from the supervision factor, floods are less likely to occur in the day time because the birds tend to minimize the effect of a leaking valve as they drink the water.

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FOR IMMEDIATE RELEASE

BEEKEEPING SHORT COURSES

Are you interested in taking a beekeeper's short course this winter?

Alberta Agriculture's supervisor of apiculture, Dr. Ulf Soehngen, says he will be pleased to arrange a short course in any area where there is sufficient interest to make such a course feasible. In the past year several short courses were held in various parts of the province. They were usually held on Friday evenings and all day on Saturdays to enable those with full-time jobs to attend.

If you feel that there is sufficient interest in your area for a beekeeper's short course, contact your district agriculturist, and ask the others who are interested to contact him as well.

Olds College is offering a beekeeping course in February 1977. It is designed for people who would like to become beekeepers and for hobbyists who would like to expand their operations.

Classes will be held on five consecutive Mondays starting February 7. The time is 7:00 p.m. to 10:00 p.m.

Further information on the Olds course may be obtained from Don Rix, Continuing Education, Olds College, Olds (telephone 226-8343).

Another course entitled "1977 Beemaster's Short Course" will be held at the University of British Columbia from March 21 to 31, 1977. An outstanding group of speakers will be lecturing and demonstrating on many phases of beekeeping. Since enrollment is limited, anyone who would like to attend the course should contact Graham Drew, director of resource industries programs as soon as possible. His address is Centre for Continuing Education, University of British Columbia, 2075 Wesbrook Place, Vancouver, B. C. V6T 1W5

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FOR IMMEDIATE RELEASE

NAME CHANGE FOR MARKETING BRANCH

Commissioner Frances Cullen of Alberta Agriculture has announced a change in the name of her branch. It is now called the food marketing branch instead of the nutrition and food marketing branch.

It was felt that the new name more appropriately expresses the emphasis that is being placed on the marketing of Alberta food products at the retail end of the marketing chain. However, the change in name does not eliminate the emphasis on nutrition as a possible vehicle for marketing products.

Fall programs being carried out by the food marketing branch cover both the promotional and educational aspects of Alberta products. They include:

- an exhibit at the International Salon of Food and Agriculture in Montreal.
- an exhibit at the Royal Agricultural Winter Fair in Toronto.
- television and radio programs.
- food and school programs in Edmonton and Calgary.
- a monthly consumer newsletter called "Connection".
- assistance to various commodity organizations in the province.

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October 25, 1976

FOR IMMEDIATE RELEASE

PORK INDUSTRY BRANCH APPOINTMENT ANNOUNCED

The appointment of Richard Underwood to the position of regional swine technician has been announced by D. S. Harbison, supervisor of swine breeding with Alberta Agriculture's pork industry branch.

Mr. Underwood will work out of the Red Deer office and will be responsible for implementing the pork industry branch's ultrasonic home testing pig program south of an east-west line through Wetaskiwin to a similar line through Calgary. He will also help to train hogmen in the use of artificial insemination and will be responsible for the on-farm follow-up of all programs that come under the direction of regional swine specialist Fred Schuld.

Mr. Underwood was raised on a small farm in the Athabasca area. After a variety of jobs related to plumbing, mechanics, laboratory work and electronics, he enrolled in animal science courses at the Vermilion College in 1973. Two years later he graduated with a certificate in agriculture.

As part of his training at Vermilion College, he worked on a 100-sow weaner pig production farm in the Vermilion area. Following graduation, he worked for a short period with Pig Improvement (Canada) Ltd. and then became swine herd manager for Avid Enterprises Ltd. at Acme. Here he was responsible for a herd of 120 sows.

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November 1, 1976

FOR IMMEDIATE RELEASE

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November 1, 1976

FOR IMMEDIATE RELEASE

RECORD CROP HARVESTED

Alberta's total crop production is expected to reach an all time high this year.

F. A. Boyce, statistician with Alberta Agriculture, reports estimated yields for wheat, oats, barley and rapeseed of 33, 58, 46 and 19 bushels per acre respectively. The wheat crop, estimated at 5 million tonnes (184 million bushels), will be second only to the 5.2 million tonnes harvested in 1966. This year's barley crop, estimated at 5.5 million tonnes, is the largest on record.

The quality of the 1976 crop is also above average with most of the grain falling into the top grades. "Bumper crops of excellent quality in Alberta and the rest of the Prairies will ensure ample supplies of top quality grain for both domestic and export markets", Mr. Boyce says.

Canada as a whole also had its best year ever in wheat production. Records are expected in both yields and total production. However, since total world production will also be sharply higher than it was last year, Canadian exports will face strong competition this year in international markets.

Although Canadian sales are expected to be good, and could exceed last year's level of 12.25 million tonnes, there is likely to be some build-up of stocks by the end of the current crop year. If exports do not exceed last year's level, stocks will increase by more than 5.4 million tonnes to 13.6 million tonnes.

About 22 million tonnes of feed grains have been harvested across Canada this year, representing an 11 per cent increase over 1975. Barley production is expected to be between 480 and 490 million bushels and oat production is expected to be between 330 and 350 million bushels. In view of this situation, Don Adnam, economist with Agriculture Canada, predicts that feed grain prices will be generally lower this year than they were last year.

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November 1, 1976

FOR IMMEDIATE RELEASE

SCLEROTINIA RESEARCH PROJECT

Alberta Agriculture has undertaken a winter research project aimed at duplicating in laboratory growth chambers, environmental conditions in the field that enable sclerotes (tiny hard-shelled, vegetative fungal structures that can lie in the ground for years) to produce air-borne spores.

In our type of climate sclerotes normally remain in the soil and produce mycelium which attacks a large variety of broad-leaved crops, including rapeseed, and causes disease in the lower part of the stem. Although this basal infection undoubtedly reduces yields, it does not seriously contaminate the seed of crops like rapeseed. However, under certain conditions the sclerotes produce spores which immediately become air-borne. When the spores land on rape plants they produce a disease in the upper part of the plants. The sclerotes that form there usually contaminate the seed when the crop is harvested.

In their attempt to duplicate field environmental conditions that cause the sclerotes to produce these air-borne spores, the scientists are using various combinations of air temperatures, soil moisture conditions and humidity levels in the growth chambers. At the present time they suspect that it is a combination of wet weather in July or August, a heavy stand of rapeseed and certain temperature levels that is responsible for the production of the sclerotinia spores.

If temperature, moisture in the soil, humidity and density of crop growth (it affects climatic conditions near the ground) are found to have a direct bearing on air-borne spore production, the scientists will then try to come up with some cultural guidelines that will help rapeseed growers keep the problem to a minimum. Such suggestions

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Sclerotinia Research Project (cont'd)

could include recommendations for wider seed spacings and the use of rape varieties that do not lodge easily, and that produce light vegetative growth, for those areas of the province where prolonged, heavy rains occassionally occur during the summer.

Other sections of the study included field investigations earlier in the fall and the gathering of data from elevator companies, extension personnel and farmers to try to establish what percentage of rapeseed crops in central Alberta were affected by the air-borne spores last summer.

Sclerotinia probably causes higher economic losses in broad-leaved crops in Alberta than any other plant disease. In addition to rapeseed, it attacks at least a dozen types of greenhouse vegetable crops, more than 30 types of greenhouse ornamental crops and upwards of 100 species of bedding plants. In the field it is most noticeable in dry and canning beans and peas, cabbage, lettuce, cauliflower, tomatoes and cucumbers. It also causes heavy losses in stored carrots, parsnips and turnips. The dollar loss from this disease in vegetable crops in the north-central United States and in Florida and California is apparently astronomical!

The Alberta research project was started in September and will finish in March 1977. Dr. Jill Williams is working under contract with Alberta Agriculture on the project and Dr. A. W. Henry, formerly with Alberta Agriculture, is the consultant. The project leader is Dave Stelfox, head of the Alberta Plant Industry's pathology section.

November 1, 1976

FOR IMMEDIATE RELEASE

COMBINE MODELS TESTED IN ALBERTA

Residents of the Berwyn district in Northern Alberta witnessed some strange combines working their area this fall.

The machines, two John Deeres (a conventional model and a side-hill model), an International Harvester and a Russian Belarus, were leased from the companies which sell them by the Prairie Agricultural Machinery Institute (PAMI) at Humboldt, Saskatchewan, for testing.

Gordon Hjertass, extension engineer with PAMI, says the combines were being tested to determine how the various models perform under variable crop and weather conditions.

The tests were begun in Saskatchewan in August, and were carried out on both light and heavy crops and on dry and not so dry crops. The moisture content of the wheat combined in the Berwyn area was as high as 22 per cent. At Berwyn the combines were also tested on barley and rapeseed crops.

None of the combines had any special features that can be commented on at this time, but the tests are evidentally indicating that each model lends itself to certain conditions more than the others. In other words, one model comes out on top under one set of conditions, while another will be superior under another set of conditions.

Since the side-hill combine is a relatively new concept, special tests are being carried out on it in an attempt to obtain some specific data on a machine that operates on an incline as opposed to one that operates on the level ground.

Results of the tests will be analyzed and compiled this winter and should be ready for publication next February or March. Anyone who is interested in obtaining them should ask to be put on the machinery institute's mailing list for test reports. The address in Alberta is the Prairie Agricultural Machinery Institute, Lethbridge Community College, Lethbridge, T1K 1L6.

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November 1, 1976

FOR IMMEDIATE RELEASE

AN INTENSIVE WARBLE CONTROL PROGRAM NEEDED

Don't wait for spring. You still have another month (November) in which to treat your cattle for warbles.

According to Alberta Agriculture's regional livestock supervisor at Calgary, Ron Weisenburger, it is imperative that an intensive warble control program be carried out in Alberta this fall.

He reports that surveys taken during the first few years of the area warble eradication programs, which were started in this province in the early 1970's, showed that the number of warble grubs had been dramatically reduced. However, the complacency that set in later has resulted in an increase in warble numbers. In fact, according to Mr. Weisenburger, we are now at the stage where the time and money spent on warble eradication during the past two years has been wasted.

He believes that everyone should do his part in bringing this battle to a successful conclusion. "The important part", he stresses, "is to make sure that you treat your own cattle in the proper manner. If your cattle are going to be sold, do not take the attitude that treating them is not your responsibility."

An American researcher, Dr. M. E. Ensinger, said in the mid-1960's that the complete eradication of warble grubs necessitates area campaigns on a farm by farm and a county by county basis. He also said that warbles are probably the most destructive insects there are that attack beef and dairy cattle.

September, October and November are the months to treat warbles.

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An Intensive Warble Control Program Needed (cont'd)

Ruelene, Neguvon, Epco Tribhlorfon, Tiguvon and Co-Ral are the systemics which are approved for use on beef cattle and non-milking dairy cattle which weigh over 300 pounds. None of them can be used in December, January or February.

Pregnant beef cows, cows suckling calves and the calves themselves (providing they weigh over 300 pounds) can be treated with a systemic.

Milking dairy cows should not be treated for warbles until next spring and then only with Rotenone.

Systemics should not be used on cattle under stress from such things as castration or dehorning.

Cattle which have been treated with a systemic should be watched closely for 24 hours after treatment. This is the period that side effects are likely to occur.

Cattle must be given water and allowed to exercise after having been treated with a systemic.

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November 1, 1976

FOR IMMEDIATE RELEASE

WEANING CALVES

If you do everything you can to minimize the many stresses imposed on calves at weaning time, you will start them on their winter feeding program in better condition.

Vaccinating, dehorning and castrating should not be done on the same day the calf is weaned. It should always be delayed for a week or two to give the calf a chance to settle into its new environment.

You can also minimize stress on the calves, and also on the cows, by separating the two groups in such a way that they cannot see, and, preferably, cannot hear each other.

Another practice which minimizes stress is to put the calves in a dry, well-bedded area. If they are not used to automatic waterers, give them low troughs or tubs to drink out of.

You should always give newly weaned calves good quality hay and some grain. The grain serves as a concentrated, palatable source of energy that is useful for combatting stress and a lack of appetite. "You might start by feeding 0.5 pounds of grain per head per day or slightly more if the calves have previously been creep fed," says Ruth Berg, animal nutritionist with Alberta Agriculture.

The amount of grain you feed can be gradually increased to between one and 4 pounds per head per day, depending upon the quantity and quality of roughage the calves are receiving and the rate of gain desired. Calves will need grain throughout the winter feeding period.

Ms. Berg recommends feeding about 15,000 international units (I.U.) per head per day of vitamin A as part of the grain mixture. You can also give your calves an injection of 1,000,000 I.U. (2 cc.) of vitamin A as an additional safeguard when they have had a week or two to adapt to their new surroundings.

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Alberta
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Weaning Calves (cont'd)

Inoculations for blackleg, malignant edema and infectious bovine rhinitis are normally recommended when the calves have recovered from the stress of weaning. Ms. Berg suggests that you discuss your inoculation program and procedures with your veterinarian.

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November 1, 1976

FOR IMMEDIATE RELEASE

LONGER THAN NORMAL GROWING SEASON

Most points in Alberta experienced a longer than normal growing season this year in terms of frost-free days.

Conrad Gietz, agrometeorologist with Alberta Agriculture, reports that at least one new record was established this year when Vermilion registered 137 days without a frost. This figure exceeds the published record for that location by 22 days.

The above figures were arrived at by considering a day to be frost-free when the recorded temperature remained above 0° C.

Mr. Gietz says Edmonton also had a long growing season this year. Here there were 162 consecutive frost-free days, which is well above the long-time average. Prior to last year, these 162 frost-free days would have been a record, but in 1975 there were 174 frost-free days in the city.

"When compared with temperatures at the International Airport at Nisku, it is apparent that Edmonton has a considerable influence on the local temperature," Mr. Gietz says. "At the International Airport there were only 121 frost-free days this year and only 79 last year."

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COMMUNICATIONS

November 1, 1976

FOR IMMEDIATE RELEASE

BEEF INQUIRIES VERSUS THE MARKETING SYSTEM

by Maurice Kraut, Marketing Economist
with Alberta Agriculture

Canada has had two inquiries into its beef marketing system in the last year. The first, completed in Manitoba, recommended a beef marketing board. The second, a federal royal commission, recommended the abolishment of terminal markets in Canada.

These inquiries came about when feedlot men and cow-calf men were taking turns losing money, while consumers were paying high prices for beef. The tentative justification in recommending these inquiries was that something was wrong with the marketing system.

The major problems facing the livestock industry appear to be: low fed cattle prices, high grain prices, low calf prices, large inventory levels, a shifting of the consumer demand pattern, increased competition from processed meats, retail costs, increased competition from other meats and unwarranted margin spreads related to animal sex and weight.

On the surface it does not appear that a total change in the marketing system is required in order to correct these problems. Regarding total market value, the federal inquiry stated,"... the producer's share to be 72.77 per cent for A-1 steers and 66.14 per cent for A-1 heifers." This is not indicative of an inefficient marketing system. It is apparent that in order to achieve a viable cost-return relationship, the livestock industry must reduce inventories, stimulate consumer demand or benefit from lower 'input' costs.

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Beef Inquiries Versus The Marketing System (cont'd)

Contributing to the producer's problems is a lack of accurate up-to-date market information. To properly utilize market information, producers must also be aware of how the marketing system acts and reacts, and the influences of national and international interrelationships.

Making sure that the current marketing system for live cattle functions in the manner it was intended is another prime consideration. A representative market is one that handles the majority of livestock. It is not divided among many small locations.

The acknowledgement that high grain prices discourage livestock feeders from purchasing calves is critical. This might be a sign for the producer to evaluate alternatives and perhaps extend his operation to the yearling stage (backgrounding).

The most important requisite to the solution of the cattle industry's problems is the realization that total changes to the marketing system should be a last resort---one that is not utilized until all other methods of improvement have been tried.

November 1, 1976

FOR IMMEDIATE RELEASE

METRIC AND GRAIN

by G. L. Calver, Chairman
Interdepartmental Committee on Metric Conversion
Alberta Agriculture

On February 1, 1977 there will no longer be a bushel or pound of grain in Canada. All grain will be bought and sold by the kilogram (kg) or the metric tonne (t) (1,000 kg). Grain quotas will be stated in kilograms per hectare (kg/ha); yields will be given in kg/ha or t/ha; and bulk grain will be weighed in tonnes to three decimal places, which is equivalent to weighing in kilograms. Grain volumes will be measured in cubic metres. Grain prices will be stated in dollars and cents per tonne.

There will no longer be any statutory densities (bushel weights) for grain, since all transactions will be strictly on a weight basis and will not be converted to volume. There are, however, representative or average bulk grain densities which can be used to determine approximate capacities of grain storages. These are as follows:

Average Bulk Grain Densities	Kilogram per Cubic Metre (kg/m^3)
Wheat	770
Beans and Peas	770
Rye	730
Corn	700
Flaxseed	650
Rapeseed and Mustard Seed	640
Screenings	640
Barley	620
Buckwheat	610
Safflower	500
Oats	470
Sunflower seed	290

Note that these are not direct mathematical conversions of present statutory bushel weights, but are, in fact, averages of typical grain bulk densities.

- (cont'd) -

Metric And Grain (cont'd)

By multiplying the appropriate bulk density by the volume of grain in cubic metres (m^3), the approximate weight of grain in storage can be determined. To obtain a more accurate estimate of the grain in storage, the test weight of a sample from the storage can be used. The test weight is the number of grams (g) in a standard half litre sample. Since g/litre is equal to kg/m^3, the test weight multiplied by 2 gives the actual bulk grain density in kg/m^3.

The primary use of test weights is for grading purposes. Minimum test weights have been established for the different grades of grain, and these are as follows:

Western Grain Minimum Test Weights

Grain	Grade Name	Grams Per Half Litre *
Wheat	1 C.W. Red Spring	365
	2 C.W. Red Spring	355
	3 C.W. Red Spring	335
Wheat	1 Canada Utility	360
	2 Canada Utility	335
	3 Canada Utility	-
Wheat	1 C.W. Amber Durum	390
	2 C.W. Amber Durum	385
	3 C.W. Amber Durum	370
	E 4 C.W. Amber Durum	370
	4 C.W. Amber Durum	360
	5 C.W. Amber Durum	345
Wheat	1 Alberta Red Winter	385
	2 Alberta Red Winter	370
	3 Alberta Red Winter	355
	4 Alberta Red Winter	345
Wheat	1 C.W. Soft White Spring	370
	2 C.W. Soft White Spring	360
	3 C.W. Soft White Spring	355
	4 C.W. Soft White Spring	335

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Metric And Grain (cont'd)

Western Grain Minimum Test Weights (cont'd)

Grain	Grade Name	Grams Per Half Litre*
Barley	1 C.W. Six-Row	295
	2 C.W. Six-Row	290
	1 C.W. Two-Row	300
	2 C.W. Two-Row	295
	1 Feed	285
	2 Feed	265
	3 Feed	-
Rye	1 Canada Western	360
	2 Canada Western	345
	3 Canada Western	330
	4 Canada Western	-
Oats	1 Canada Western	245
	2 Canada Western	235
	E 3 Canada Western	245
	3 Canada Western	220
	E 1 Feed	245
	1 Feed	220
	2 Feed	195
	3 Feed	-
Flaxseed	1 Canada Western	315
	2 Canada Western	310
	3 Canada Western	290
	4 Canada Western	270
Corn	1 Canada Western	345
	2 Canada Western	335
	3 Canada Western	320
	4 Canada Western	310
	5 Canada Western	290
Peas	1 Canada Western	385
	2 Canada Western	375
	3 Canada Western	360
	E 4 Canada Western	360
	4 Canada Western	-
Buckwheat	1 Canada	290
	2 Canada	275
	3 Canada	260
Safflower Seed	1 Canada Western	250
	2 Canada Western	235
	3 Canada Western	220

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Metric And Grain (cont'd)

* Approved one-half litre measure.

Anyone encountering problems with metric conversion of grains should contact his district agriculturist.

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November 1, 1976

FOR IMMEDIATE RELEASE

FARMERS' MARKETS INCREASE IN ALBERTA

"Farmers' Markets Grow on You" - that was Alberta Agriculture's slogan this year-- and sure enough they grew from 35 last year to 46 this year.

Three years ago there were only a few privately owned farmers' markets in Alberta. "Now, we are second only to Ontario in the number of farmers' markets," says David Rous of Alberta Agriculture. He believes the purpose of Alberta's farmers' market program has been two-fold: to provide another marketing vehicle for vegetable producers here, and to give consumers a chance to purchase fresh, high quality products directly from the farmer.

Where do we go from here? A survey taken in 1973 indicated that there were 43 towns in the province with a population of over 3,000, and with a trading area of about 5,000 people, that could support a market. With 46 markets now established, there will probably not be many additional markets in the near future. However, there is an opportunity for one or two large 'prestige-type' markets to be established in Edmonton and Calgary to supply products to the more than half a million people in each city, and to provide an outlet for many top quality vegetable producers in and around these area.

There is also room for expansion in those markets already established. In many cases they could broaden their range of products and perhaps lengthen their operating season. Some could even aim at a more permanent type of facility. Also specialty sales could be held, particularly in festive seasons.

What is the future role of the government in farmers' markets? Alberta Agriculture will continue to support these markets if they need support. If, on the other hand, they can become entirely self-sufficient, so much the better. It is also possible that farmers' market managers may want to form their own association so that

(cont'd).

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Farmers' Markets Increase In Alberta (cont'd)

they have a central body to handle administrative and/or promotional matters.

Just as important as the growing number of markets has been the increase in the number of consumers and producers who participated in these markets last summer. Even the produce was more abundant this year, particularly vegetables because of the favorable growing conditions. Some market managers reported surplus cabbage, corn and root vegetables.

A large number of markets managed to stretch the length of their marketing season this year by selling bedding plants, handicrafts, wool products, baked goods, British Columbia fruit and so on. "Many of the managers" says Mr. Rous, "told me that this was their best year yet".

Anyone who would like information on farmers' markets should contact the Commodity Development Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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CORRECTION: The fourth sentence of the seventh paragraph in the article "Pregnancy Testing" (October 25 issue of "Agri-News") should read "Culling those 10 cows will result in a saving of $700 in feed costs - NOT $600 as stated in the article.

November 1, 1976

FOR IMMEDIATE RELEASE

WINTER STUDY PROGRAM

December is the deadline for registering for this year's Rural Education and Development Association's free winter study program.

Offered each winter and assisted by a grant from Alberta Agriculture, the program provides participants with information on current economic and social development trends and problems that affect town and rural life. It is also designed to help participants improve their situation in the community or in the management of an agricultural business.

Participants have two options. They can register for the program as an individual (which includes the family) or they can register as a member of a group. The second option is open to people who would like to form a winter study group in their community and to those who are already established in a group.

The program is divided into four series of topics. Regardless of whether you are participating as an individual or as a group member, you are entitled to have papers sent to you on all the topics in the series or papers on any five topics chosen from any of the series.

Following is a list of the series:

Series A - For Discussion and Debate

- Foreign Investment and Ownership in Agriculture in Alberta
- Social Myths on the Prairies
- What is a Farm Wife Worth?
- Co-operative, Corporate and Government Growth
- Freight Rates and Western Canada

- (cont'd) -

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Winter Study Program (cont'd)

Series B - For Information

- New Income Tax Laws and Tips for Farmers
- Our Energy Scene Today
- Habitat: Human Settlement
- Agriculture Abroad - Project Indonesia

Series C - For Farm Management

- Planning Farm Machinery and Labor Requirements
- Rural Real Estate Values in Alberta
- A Farmer's Guide to Subdivision
- Analysing a Farm Business
- Developing a Neat and Orderly Bookkeeping System

Series D - For People Power

- Saying "No"
- Authority and Responsibility
- The Nature of Power and Influence
- Speaking in Public
- The Creative Spirit

For further information write to the Rural Education and Development Association, 9934 - 106 Street, Edmonton, T5K 1C4 or contact your district agriculturist or district home economist.

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November 1, 1976

FOR IMMEDIATE RELEASE

RESULTS OF BEEF GRADE STUDY

Results of a study carried out by researchers at the University of Alberta on the beef grades that were introduced by the federal government in 1972 are now available in a bulletin entitled "The New Beef Grades".

The study, funded by the Alberta Cattle Commission, the Alberta Agricultural Research Trust and Alberta Agriculture, was undertaken because several difficulties with regard to the performance of the beef marketing system, as a result of the new grades, were raised by some industry sources.

The initial phase of the study was concerned with the prediction of retail cutability and the subsequent pricing accuracy of the new beef grades. The second phase involved economic factors and conditions which led to the necessity of developing a satisfactory grade classification scheme. It considered the changes that have occured in the beef marketing system and their impact on the individual sectors of the system. The third phase concerned the consumer's knowledge of grades and their usefulness. It also took into account the attitude of retail butchers towards the new beef grades.

Copies of "The New Beef Grades," can be obtained from the Agricultural Supervisor, Faculty of Extension, Corbett Hall, University of Alberta, Edmonton T6G 2G4.

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Phone (403) 427-2127

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November 1, 1976

FOR IMMEDIATE RELEASE

FOOD LABORATORY APPOINTMENT

Dr. V. W. Kadis, director of Alberta Agriculture's food laboratory, has announced the appointment of Lawrence McKnight to the position of supervisor of central milk testing at the laboratory. His appointment becomes effective November 2.

As supervisor of central milk testing, Mr. McKnight will be responsible for all milk testing for payment purpose and will supervise the analysis of milk for the provincial Dairy Herd Improvement Program.

Mr. McKnight was born and raised in the Calgary area. He attended the University of Alberta, graduating in 1959 with a B. Sc. (agriculture). Two years later he obtained an M. Sc. (dairy science).

Following graduation, Mr. McKnight joined Alberta Agriculture's dairy branch as a dairy inspector in Edmonton's north-west district. In 1962 he worked for a short time in the dairy laboratory in Edmonton, and then moved to Ontario where he lectured in the Department of Dairy Science at the University of Guelph.

While at Guelph he taught and did research and extension work related to farm cream production and butter manufacturing. He also taught degree-level students, in the areas of food analysis and dairy chemistry, and general dairying in the two-year diploma program.

Mr. McKnight returned to Alberta in 1974 as research associate in the Alberta Dairymen's Research Unit, located in the University of Alberta's Department of Food Science.

Mr. McKnight is author and co-author of numerous scientific and trade papers and is a member of several scientific and technical organizations.

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November 8, 1976

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Alberta
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November 8, 1976

FOR IMMEDIATE RELEASE

PREMIER ADDRESSES 1976 4-H LEADERS' CONFERENCE

Premier Peter Lougheed will be the featured speaker at this year's provincial 4-H Leaders' Conference, scheduled for November 8 to 10 at Edmonton's Mayfield Inn.

The premier will stress to delegates the importance of their volunteer work in creating self-reliance and initiative in young Albertans.

About 300 delegates, all volunteer leaders or leaders in training, are expected at the annual conference, says June Marshall, supervisor of leadership development for 4-H in Alberta.

"I hope 4-H club leaders will leave the conference with increased confidence in their abilities to lead a group. They'll have an opportunity to gain expertise in a number of areas and to build their enthusiasm for the coming club year," Ms. Marshall says.

"I hope they feel their questions have been answered and that they're proud to be involved in the 4-H movement."

Ms. Marshall adds the 4-H Club's development has paralleled the growth of agriculture in Alberta, and 1977 will mark the rural youth organization's 60th anniversary.

While club projects were originally restricted to livestock and home management topics, the 4-H movement has now diversified to permit city youngsters to take part, and to include projects such as woodworking, gardening, automotives, and photography.

This year, information kiosks, workshops and a general meeting are the major events of the three-day conference.

- (cont'd) -

Premier Addresses 1976 4-H Leaders' Conference (cont'd)

Special guests include Alberta agriculture minister Marvin Moore, and recreation, parks and wildlife minister Al Adair. Four delegates from Montana will attend by special invitation, continuing a tradition of several years.

On Monday, delegates will browse through a kiosk display area of small or less-known projects, including pheasants, sheep, small engines, swine and beekeeping.

Tuesday will be devoted to project sessions, allowing leaders to discuss fresh approaches to traditional 4-H projects, and to become familiar with recently introduced topics.

Morning sessions will focus on clothing, dairy, and light horse clubs and operating a 4-H club ; and for new leaders, a look at 4-H programs. The new leaders' introduction will be repeated in the afternoon session, also featuring foods, crafts, leather-crafts, interior design and range management.

A session for judges of public speaking contests and three-hour workshop "What is junior leadership?" are also scheduled.

Tuesday evening, delegates will choose a tour of Farm Fair '76 at the Edmonton Exhibition Grounds or a performance of 'The Public Eye' by the Northern Lights Theatre.

Wednesday morning's general session will promote discussion of the 4-H centre concept. Celebration plans for 1977's 60th anniversary of 4-H in the province will also be initiated.

The conference is sponsored by the Alberta Wheat Pool, United Grain Growers, Agriculture Canada and Alberta Agriculture.

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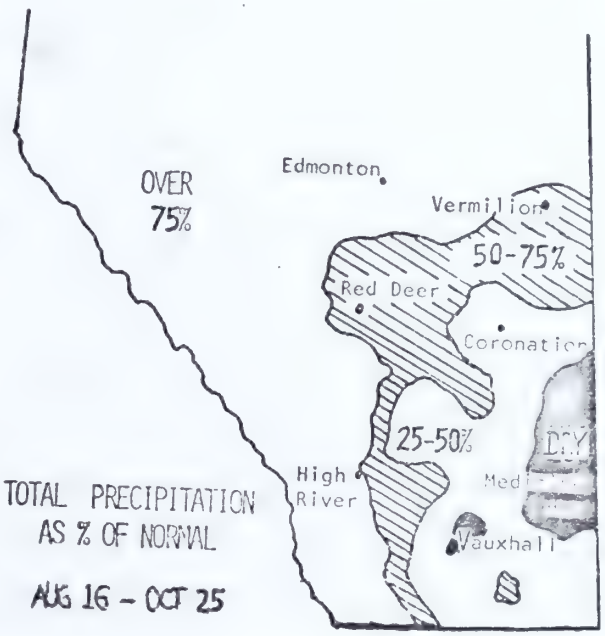
FOR IMMEDIATE RELEASE

SOIL MOISTURE SITUATION

Next year's crop yields in many parts of Alberta could be adversely affected by an exceptionally low level of stored soil moisture.

According to Conrad Gietz, agrometeorologist with Alberta Agriculture, the overall soil moisture shortage in the province appears to be even more severe than it was last year when concern over the situation was wide-spread.

He reports that soil moisture shortages are evident south and east of a line that joins Vermilion, Red Deer and High River. "The situation", he says, "becomes more serious as one moves further south and east of these areas".



The most severe moisture shortages are centred in a band extending about 120 miles north from Medicine Hat and in the Vauxhall area. The accumulation of precipitation in these areas since mid-August has been less than 25 per cent of average levels.

"Analysis of fall precipitation in the light of past experience", Mr. Gietz says, "suggests that the lack of soil moisture carryover may well be critical over an extensive area of the province unless precipitation between now and freeze-up is exceptionally high." The situation is aggravated by the fact that soil moisture levels appear to be lowest in that part of the province where dryland farming is most dependent upon moisture reserves and where a lack of moisture limits production even in 'normal' years.

- (cont'd) -

Soil Moisture Situation (cont'd)

Precipitation received in the interval between harvesting and soil freeze-up can be very efficient in adding to the soil water carryover because evaporative losses are relatively small at this time. Also, the soil permits considerable infiltration prior to freeze-up.

Soil moisture reserves at spring planting time determine optimum fertilizer rates, and, ultimately, crop yields. If spring reserves are too low, it may be risky to crop stubble land in those parts of the province which normally suffer from a lack of moisture during the growing season.

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November 8, 1976

FOR IMMEDIATE RELEASE

SASKATCHEWAN HELPS TO ERADICATE WARBLES

Alberta cattlement are getting some keen competition in warble control from their Saskatchewan counterparts.

Since the spring of 1975, when Saskatchewan adopted a province-wide warble control program, that province has cut the number of cattle found to be infested with warbles by almost 50 per cent.

Of the 240,000 head checked for warbles by Saskatchewan Agriculture's livestock inspectors from March to June (the period when warbles are most easily detected) of this year, about 28,000 or approximately 11 per cent were found to have one or more warbles. Prior to implementation of the program the rate of infestation at auction markets ranged from 20 to 30 per cent and even higher at some markets.

Based on auction market inspections, the number of cattle in Saskatchewan that are infested with warbles is still more than twice the number in Alberta, but it is important to realize that their warble control program has only been in effect for about two years compared with about five years for Alberta. If Saskatchewan's cattlemen continue to do as good a job of treatment as they have done in the last year, they will out-distance Alberta in the warble control battle.

In several areas of Saskatchewan where local warble control committees were established several years ago, the percentage of cattle with warbles was extremely low both last year and this year. For example, in south-western Saskatchewan where cattle have been inspected for warbles for the last four years, the percentage of infested animals was in the 2 to 3 per cent range in 1975 and again this year.

At most Saskatchewan auction markets, warble infested cattle were tagged with a yellow ear tag bearing the words "Warble Infested". Next year this

- (cont'd) -

Saskatchewan Helps To Eradicate Warbles (cont'd)

procedure will be followed at all livestock markets in that province.

In Alberta cattle that are found to have warbles when they are inspected at auction markets are treated, unless they are going for slaughter, and the person selling them is charged $2 per head.

Michael Dolinski, entomologist and pest control specialist with Alberta Agriculture, says Saskatchewan's province-wide warble control program is excellent news for Alberta cattlemen. "In the past", he explains, "Saskatchewan has been a serious source of infestation here because many of the cattle which came from Saskatchewan were heavily infested with warbles. A joint effort on the part of our two provinces will certainly help to eradicate warble flies in this part of Western Canada."

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November 8, 1976

FOR IMMEDIATE RELEASE

CATTLE PRICE AND SUPPLY OUTLOOK

Fed beef prices for A1 and A2 steers at the Calgary market are expected to average out at $38 to $40 per hundredweight during the last quarter of this year, with more emphasis on the lower end of the scale.

Alberta Agriculture's marketing economist, Maurice Kraut, points out that although these prices are expected to be the average, there are likely to be times later in the year when prices range from $40 to $42.50 per hundredweight. The latter type of price range is expected to continue into the first quarter of 1977.

Feeder Cattle

With the expected seasonal increase in yearling and calf marketings, feeder cattle prices will probably decline from their present levels. "Although current barley prices of $1.70 to $1.80 per bushel have improved feeding margins considerably in Alberta, they have not been enough to maintain high feeder prices," Mr. Kraut says.

There have been some preliminary indications from fall calf sales of animals in the 400-pound range selling for $38 to $39 per hundredweight, and of some 'reputation' lots going for as high as $45 per hundredweight, but these prices are not expected to continue. With barley prices likely to increase, and with the number of calves available, prices of this magnitude will be sporadic unless farmers and ranchers hold their calves off the market.

In the case of a 450-pound steer, every 25¢ per bushel increase in the price of barley results in a $7 per hundredweight decrease in the price of the calf. The price for a 600-pound feeder should decrease $4 per hundredweight with every 25¢ per bushel increase in the price of barley.

- (cont'd) -

Cattle Price And Supply Outlook (cont'd)

Cows

D1 and D2 cows at Calgary are expected to be in the $17 to $21 per hundredweight price range during the last quarter of this year. Mr. Kraut believes that the good demand for this type of beef in the 'quick food' area might keep prices up to an average of $19 per hundredweight.

Although Canadian weekly cow slaughter has been declining since the fourth quarter of 1975, it is likely that total cow disappearance in 1976 will be higher (projected to be 920,000 compared with 900,000 in 1975). However, this increased marketing of cows is expected to decline as 1977 approaches. Even though calf prices are not likely to be exceptional, they should be sufficient to stem any large cow movement to market.

The action taken by the Canadian and American governments in limiting imports, although late for a significant effect on prices, will have a stabilizing effect on the market.

"The outlook for 1977 is for less cows to be slaughtered because price conditions for other classes of cattle are expected to improve enough to provide an incentive for keeping cow herd numbers at their present levels," Mr. Kraut says.

Supply Situation

The Canadian beef supply outlook for the last quarter of this year is for a normal seasonal increase in slaughter, but not as large percentage-wise as that witnessed in 1975.

In the United States, a seasonal-type increase in cattle slaughter is anticipated, but not to the levels recorded in 1975. The key areas that will affect U. S. beef supply and prices for the balance of this year and into 1977 are feed prices, fall and winter pasture conditions, pork supply and the size of total beef imports into that country. It is not anticipated that the beef supply in terms of total pounds, for 1977, will be significantly different to that of 1976.

November 8, 1976

FOR IMMEDIATE RELEASE

BEEF TRADE SUMMARY

Total Canadian beef and veal imports in the third quarter of this year to the middle of September were 55 million pounds, representing a 62 per cent increase over the same period last year, says Maurice Kraut, marketing economist with Alberta Agriculture.

During the third quarter of 1976, Canada exported nearly 24 million pounds of beef and veal in either carcass or processed form. Live cattle exports amounted to another 24,000 head. These animals were mainly cows, but there were 6,000 feeders.

Canada as a whole imported approximately 19,000 head of cattle for slaughter, mainly in Ontario. The differential of $4 per hundredweight between Toronto and Omaha for steers was responsible for this influx. In addition, 11,000 slaughter calves were imported from the U. S. Although some of them went to Quebec, the majority ended up in Ontario. To date there have been no feeder cattle imported to Canada.

U. S. beef imports during the third quarter of the year were under 5 million pounds compared with 550,000 in 1975. However, from January to July of this year, U. S. beef carcass imports were up 20 per cent, and live cattle imports increased from about 100,000 head to nearly 500,000 head.

To the end of September of this year, Canada has exported to the U.S. 69.5 million pounds of beef and veal and imported nearly 19 million pounds of beef and veal. In addition, Canada has exported 15.8 million pounds of pork to the U. S. and imported 118.4 million pounds. This leaves a total dressed meat trade balance in favor of the U. S. of more than 50 million pounds.

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November 8, 1976

FOR IMMEDIATE RELEASE

WINTER FEEDING CALVES

Calves should be fed a ration during the winter that will allow them to achieve a 'reasonable' rate of gain.

Ruth Berg, animal nutritionist with Alberta Agriculture, reports research findings show that the most desirable rate of gain for calves of the traditional Alberta breeds is one to 1.5 pounds per day. Calves which make lower gains than these will be in poor condition by the spring and will be more susceptible to stress and disease.

Animals being kept for replacement breeding stock will exhibit a delay in the onset of puberty if they do not gain at the rate of one to 1.5 pounds per day. In fact, calves from the larger breeds may need to gain more than this amount per day for optimum reproductive performance.

Ms. Berg reports that a study carried out on Hereford and Angus heifers showed that three-quarters of the animals that gained one pound per day during the winter came into heat at 14 months of age compared with only half of those that had gained 0.5 pounds per day. "Other studies," Ms. Berg says, "have also showed that under feeding results in delayed breeding."

She stresses that a growing ration must always be higher in quality than a maintenance ration. While a cow can maintain herself on poor to medium quality roughage, a calf on poor to medium quality roughage must recieve some grain, and perhaps,some protein supplement as well.

The following sample rations have been formulated for 'average' feeds to give a gain of one pound per day on a 450-pound steer.

- (cont'd) -

Winter Feeding Calves (cont'd)

Ration A: 13 pounds of excellent quality alfalfa hay

Ration B: 10 pounds of good quality alfalfa hay
2 pounds of barley

Ration C: 10 pounds of oat greenfeed
1.3 pounds of barley
0.7 pounds of 32 per cent protein supplement

Ration D: 8.5 pounds of alfalfa-brome hay (50:50)
4 pounds of barley

Ms. Berg says each of the above rations must be supplemented with blue or trace-mineralized salt, a calcium-phosphorus mineral, and 15,000 international units per head per day of vitamin A.

She points out that the above rations are only suggestions, based on average feeds, and may not be the right ones for many situations. Differences in the quantity and quality of roughage might, for example, necessitate feeding more grain and a protein supplement. The quality of grain will also have a bearing on the amount of grain fed and the extra protein supplement that may be required.

You can find out that quality of your feeds, and what supplements should be added, by having them tested at the provincial soil and feed testing laboratory in Edmonton. The animal nutritionists there will also formulate rations based on your feed analysis if you require this service.

For information on submitting feed samples and on feed analysis services contact your district agriculturist or the Alberta Soil and Feed Testing Laboratory, 6909 - 116 Street, Edmonton T6H 4P2.

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November 8, 1976

FOR IMMEDIATE RELEASE

ORDER FORAGE FOUNDATION SEED NOW

Alberta Agriculture's forage crop specialist, Larry Gareau, urges farmers who intend to buy foundation grass or legume seed for 1977 planting to get their orders in as soon as possible.

He points out that seed supplies are allocated each year at the Canadian Forage Seed Project's annual meeting which is held in early January. If there is a shortage of a particular variety, orders that were received first will be filled first.

The Canadian Forage Seed Project, established in 1950, is an association made up of government, research and seed trade personnel as well as seed growers' organizations to promote improved forage varieties in Canada. It does this by maintaining adequate supplies of each variety which they sell, while at the same time keeping stocks at manageable levels.

According to Mr. Gareau, foundation seed of approximately 40 grasses and legumes will be available for 1977 planting from the Canadian Forage Seed Project through the seed trade and Alberta Agriculture.

The seed trade generally distributes foundation seed to farmers under an agreement that the grower will sell the subsequent crop back to the firm. However, if a farmer does not want the advantages and disadvantages of a contract, he can obtain his foundation seed through Alberta Agriculture.

Application forms for obtaining foundation seed through Alberta Agriculture are available from all district agriculturists. The forms should be returned to the district agriculturist who will then forward them to Alberta Agriculture's field crops branch.

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November 8, 1976

FOR IMMEDIATE RELEASE

METRIC CALENDAR

All Alberta farmers should have received a metric conversion calendar by the middle of this month.

Developed and distributed by Agriculture Canada, the calendar is intended to help Canadian farmers make the change over to the metric system as smoothly as possible. In addition to giving the dates on which the various sectors of the agricultural industry will go metric, it contains conversion charts which explain the metric system and how it will apply to agriculture.

Canada plans to be fully metric by 1981 when it will join the more than 90 per cent of the world's population which already uses the metric system.

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November 8, 1976

FOR IMMEDIATE RELEASE

OCCUPATIONAL STUDY

A considerable number of participants in the last year's provincial Summer Farm Employment Program (SFEP) chose farming as a career, reflecting the occupation of their fathers and an orientation towards their area of residence.

This was revealed in a study carried out by Solomon Kyeremanteng of Alberta Agriculture's farm development division. To obtain this information he handed out questionnaires to some SFEP participants who attended the compulsory farm safety orientation seminars which were held throughout Alberta in 1975.

The study showed that 399 of the 845 SFEP participants who answered the questionnaire were considering farming as an occupation. As expected, occupational identification with parents and peer groups as well as area of residence were the determining factors. The study results also showed that the majority of those surveyed chose a trade as an alternative to farming. This again is consistent with the nature of their parents' occupation in that most farmers in Alberta are skilled tradesmen.

Although the results validate the assumption that young people are strongly influenced in their choice of a career by what their fathers do, they do not identify specifically the reasons that those who took part in the study chose or did not choose farming as an occupation. The results also failed to explain why a considerable number of participants from rural areas whose parents were farmers or tradesmen chose professional occupations.

In addition, the study failed to show the impact of parental occupational income and socio-economic status on occupational choice. A number of social scientists have found that these variables have a significant influence on the occupational choice of young people.

- (cont'd) -

Occupational Study (cont'd)

Hence, the results of the study might have been different if it had dealt with the concept of parental occupational income and socio-economic status. "By ignoring this concept," says Mr. Kyeremanteng, "we did not take into consideration the cultural differences behind behavior patterns that are attributed to specific deprivations or gratifications of self-esteem and safety needs during the early childhood of those surveyed."

Despite its limitations, however, the study shows that a considerable number of young people in Alberta would like to be farmers. In this way it shows where the human resources required to alleviate the continuing scarcity of farmers and farm labor in Alberta can be found.

According to Mr. Kyeremanteng, his study is just the beginning. "There is a need", he says, "for follow-up work which will encompass the limitations mentioned above." It is hoped that future research will tell more about those variables which influence the choice of farming as a career.

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November 8, 1976

FOR IMMEDIATE RELEASE

A 'HOW-TO-DO-IT' MANUAL FOR AGRICULTURAL SOCIETIES

A booklet entitled "Money Making Ventures for Community Organizations" has been published by Alberta Agriculture to help agricultural societies to raise funds for the many projects they carry out to enrich rural life.

Some agricultural societies in Alberta are running into financial difficulties because of rising costs associated with loan repayments, insurance premiums, caretaker salaries, power bills and building maintenance. Since government assistance is limited, and because it is not the answer in most situations, it was felt that the best method of attacking the problem was to help the societies by setting out guidelines for raising money successfully.

The information contained in the booklet was obtained from libraries, government departments and community organizations. In fact, a large portion of the material came from the agricultural societies themselves through a combination of self-administered questionnaires, telephone interviews and personal interviews.

"Money Making Ventures for Community Organizations" is divided into two main sections. The first outlines how to organize and prepare money making ventures and how to help make them successful. It provides the background information that is essential for making the money raising projects, listed and described in the second section, work. Since not all the money making ventures presented are equally desirable for each society, it is important to know how to choose the appropriate one. Such things as the community's needs, likes, and interests are important considerations when planning and organizing a money making venture. This means that each project must be adapted to the existing situation.

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A 'How-to-do-it' Manual For Agricultural Societies (cont'd)

The second section describes in detail the actual money making ventures that are open to agricultural societies. It emphasizes the more novel approaches to money raising. An appendix at the back of the booklet lists all the avenues of income available to agricultural societies in Alberta.

"Money Making Ventures for Community Organizations" can be obtained from Lillas Brown, Community Organization Branch, Agriculture Building, 9718 - 107 Street, Edmonton T5K 2C8.

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FOR IMMEDIATE RELEASE

PROPAGATING PLANTS FOR CHRISTMAS

Have you ever propagated slips from a house plant to give as Christmas presents? When planted in a nice container, they make attractive and inexpensive presents for people who enjoy plants.

According to Alberta Agriculture's horticultural specialist, Arlene Chesney, many plants can be propagated from slips. Among them are peperomia, scindapsus, wandering jew, coleus, ivy, velvet plant, hoya, aluminum plant, arrow head and the African violet.

With the exception of the African violet, you take three or four-inch long cutting from the terminal growth of the plant. Cutting the terminal growth of your plants will not hurt them. In fact, it will help control their height and shape. In the case of the African violet, you take a leaf and stem for each new plant you want to start.

Plant your cuttings directly in perlite, peat moss or vermiculite or a combination of all three. You can obtain these materials from any garden supply centre. Keep the growing media moist during the entire rooting process. Some people put a plastic bag over the cutting and the container to keep the humidity high. "Cuttings root best in a moderate light and a temperature of 21° and 24° C.," Miss Chesney says.

The growth rate of cuttings depends upon the type of plant you are propagating. Any of those mentioned above should be started now if you want to give them away for Christmas. If you are afraid your cutting will not be ready for Christmas, you can use a root hormone, also available from garden supply centres, to stimulate its growth.

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November 8, 1976

FOR IMMEDIATE RELEASE

WEATHERIZE YOUR HOME

by Betty Birch
Alberta Agriculture's District
Home Economist at Stettler

Those winds blowing around these days are starting to get pretty cool, which means winter is well on the way. And this means it's time to give your house the 'once over' and get it prepared for winter.

Start by inspecting the roof for lifting shingles and leaks. It's best not to walk on the roof if you have asphalt shingles, unless necessary. Walking on them rubs the outer layer of the asphalt on the shingles, and this decreases their life. A good way to tell if the roof leaks is to check the roof in the attic for water stains.

Next, clear all leaves and debris from the valleys of the roof, rain gutters and eavestroughs. This debris can cause water and snow to back up and ice to form. The ice will eventually work up under the shingles and cause them to lift.

Speaking of ice, don't forget to drain the water barrel and shut off your outside tap. Turn the water off from inside the house and leave the tap open outside. If your outside tap doesn't have a shut-off tap inside the house, it is probably a self-draining type and you don't have to worry about it.

Even though your house is well insulated, it still may be possible to reduce heating costs. Weather-stripping doors and windows can reduce total heat loss by as much as 35 per cent. A good time to check your weatherstripping is when you put your storm windows on.

Double-hung windows should be weather-stripped with one of the following materials: thin metal spring strips, tubular or sponge filled core vinyl (this is best), adhesive backed foam or felt. The drawback to foam and felt is that they usually last only two years.

- (cont'd) -

Weatherize Your Home (cont'd)

Metal framed windows of the casement or awning type can be weather-stripped with a transparent vinyl tape that goes over their edges. There is also an aluminum strip made especially for casement windows.

If interior panes of glass frost up in the cold weather, it means cold air is entering the room around the storm window and that the weather-stripping should be replaced.

Your doors may need weather-stripping also. There are four basic types of outer jamb weatherstripping. These are wood strip with foam backing, aluminum channel with vinyl backing, adhesive-backed foam strip and felt stripping.

Caulking or sealing is important to the soundness of a house and keeps it air and water tight. Caulking is available in bulk or in disposable cartridges.

Oilbase caulking is the most commonly used. It will band to wood, masonry and metal surfaces. A latex base caulking is fast drying and will paint well. Silicone caulking is the longest lasting and adheres to everything except paint.

The places on your house that you should check to see if they need caulking are:

- where the chimney meets roof shingles.
- where the chimney meets the wall siding.
- all roof flashings.
- where underside of eaves meet the gable and molding.
- around windows.
- between masonry steps, porches, patios and the main body of the house.
- all interior corners formed by siding.
- around door frames.
- between siding and vestibule or porch roofs.

Caulking in the proper places will keep out moisture, which can deteriorate plaster and paint on the inside of your home.

The best kind of winter is one you're prepared for.

November 8, 1976

FOR IMMEDIATE RELEASE

EXTENSION APPOINTMENTS ANNOUNCED

J. G. Calpas, director of Alberta Agriculture's extension division, has announced the appointments of Loren Krause and Ken Bunnage to the position of district agriculturist at Brooks and High River respectively.

Mr. Krause

A native of the Medicine Hat area, Mr. Krause graduated with a diploma in practical agriculture from the Vermilion college in 1963. He later attended the University of Alberta, graduating in 1967 with a B.Sc. (agriculture).

Following graduation, Mr. Krause joined Alberta Agriculture as field assistant in the economics division. In 1968 he was appointed economist with the same division and was responsible for teaching farm management courses to farmers in central Alberta as well as for up-grading computer programs.

Mr. Krause left Alberta Agriculture in 1969 to become property manager and part owner of a large cattle and grain farm north-east of Brooks. In 1974, he rejoined Alberta Agriculture as supervisor of feeder associations. In this capacity he supervised, and organized, the operations of 48 livestock co-operatives in the province.

Mr. Krause held the position of supervisor of feeder associations until his present appointment. He replaces Rueben Neumier who resigned to enroll in the Western College of Veterinary Medicine in Saskatoon, Saskatchewan.

Mr. Bunnage

Ken Bunnage comes from the Glenwood area. He attended the Brigham Young University in the United States and graduated with a B. Sc. (agriculture) in 1973. His major was agricultural economics.

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Extension Appointments Announced (cont'd)

Mr. Bunnage joined the staff at Brigham Young University for the academic year of 1974-75. Here he taught advanced farm management courses. In the summer of 1975 he joined Alberta Agriculture as farm management specialist where he was responsible for promoting Canfarm's farm planning aids and for helping extension staff in the farm management aspects of their work.

Following a training period this winter at High River, Mr. Bunnage will be transferred to the Strathmore office to replace Art Edwards who is now district agriculturist at Calgary.

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November 15, 1976

FOR IMMEDIATE RELEASE

RETAIL FOOD PRICE COMPARISON REPORT COMPLETED

Minister of Agriculture, Marvin Moore, has announced the completion of a retail food price comparison report conducted for Alberta Agriculture by Market Surveys Ltd.

The study compared food prices for Alberta, British Columbia and the State of Washington, and involved Edmonton, Calgary, Vancouver, Seattle and Spokane. It was an extension of the food price monitoring system that was established in Alberta three years ago.

Prices on 43 grocery items were monitored for six weeks during August and September. An index was calculated from these prices and related to the Edmonton base index for 1975 being equal to 100.

Analysis of the information, obtained from the study, showed that Edmonton and Calgary enjoyed the lowest food prices, while Vancouver had the highest retail food prices. Vancouver's index was 18 per cent higher than that of Edmonton and Calgary. The index for Spokane and Seattle was 4 per cent higher than that recorded in Edmonton and Calgary.

The report shows that Alberta consumers have benefited greatly from low livestock prices. In fact, the main cause of the low index here, was significantly lower prices for beef, pork and processed meat products than was the case in British Columbia and the State of Washington. Prices for dairy products were also significantly lower in Edmonton and Calgary than in British Columbia and Washington.

Poultry, eggs, fish, vegetable oils and processed fruits and vegetables were generally priced lower in Seattle and Spokane stores than they were in Canadian stores. Prices for fresh fruits and vegetables were relatively uniform throughout the cities, covered by the study.

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November 15, 1976

FOR IMMEDIATE RELEASE

CEREAL AND OILSEED OUTLOOK

It is doubtful that any marked or sustained improvement in wheat prices will occur in the near future.

This statement was made by Peter Perkins who recently left Alberta Agriculture to join the United Grain Growers as managing editor of their monthly publication "Grainews". He says the present glum wheat picture can be explained by the almost certain prospects of record crops in many major wheat producing regions, and the fact that much of the increased production is in the hands of the two leading wheat sellers, Canada and the United States.

The most recent official estimate of the Canadian crop suggests an all-time record harvest of 23.6 million tonnes, representing an increase of 6.5 million tonnes over last year's production. The American wheat crop is now forecasted to be 57.9 million tonnes, matching last year's record harvest. The Soviet crop is better than expected. It is estimated at 85 to 90 million tonnes, compared with 66 million tonnes last year.

Although wheat crops in East and West European regions are smaller than originally predicted, these reductions will probably be offset by a sharply improved Argentine crop. Early indications are that Argentina will reap a crop approaching the record levels of the 1960's.

Statistically, therefore, world wheat production is expected to be in excess of 395 million tonnes, which is more than 45 million tonnes higher than that of 1975-76, and a world record. The impact of this additional production is expected to cause world wheat stocks to jump by 40 per cent to upwards of 90 million tonnes by the middle of next year. It is anticipated that a large portion of these additional stocks will accumulate

- (cont'd) -

Cereal And Oilseed Outlook (cont'd)

in North America. However, this conclusion does not take into consideration the importance of a potential increase in the use of wheat as livestock feed in North America or higher export clearances through food aid programs.

"From the point of view of price," says Mr. Perkins, "one can expect the 1976-77 wheat pool to yield prices of at least 50¢ less than last year." Although these prices may not be very encouraging to the farmer, the Prairie wheat economy as a whole will not suffer. Total receipts are estimated to be $300 million higher in the 1976-77 crop year than they were in the last crop year.

The durum wheat situation is far less favorable than that for spring wheats because of record yields in Canada and the United States, good crops in most of the main importing regions and a large carryover from last year. "The result," Mr. Perkins says, "is that we can expect very low delivery quotas and prices from the pool that are lower than comparable values for red spring wheats."

Feed Grains

Feed grain price prospects are more favorable than they were a couple of months ago because the Americans have a weather-reduced corn crop. It is even probable that their total crop will not achieve the record level of last year.

Although U. S. barley and oat figures are up a little from earlier estimates, the sorghum crop has been further downgraded, with the result that the total American feed grains crop is already estimated to be lower than that of last year.

European feed grain crops remain poor, but continuing improvement in the Soviet feed grains crop will partly offset the European situation.

However, wheat stocks in both Canada and the U. S. could be burdensome enough to hold in check any strength that might otherwise independently appear in the

Cereal And Oilseed Outlook (cont'd)

feed grain sector. U. S. corn and Canadian feed barley prices will most likely continue to follow wheat prices for the next couple of months.

Even though the North American livestock feed demand will probably remain higher this year than in 1975, sufficient supplies of feed grains, including feed wheats, should prevent further gains in prices relative to wheat even in the face of good exports.

Canadian barley exports have been moving well, running slightly ahead of last year's levels. Trade sources indicate that the board has already sold all the barley available for export. This keen demand for export barley should ensure full delivery opportunities and attractive prices for the current crop year.

Prospects for malting barley remain excellent. Final values in excess of the 50¢ spread over feed reflected in initial prices seem likely.

Oilseeds

The erratic pattern of oilseed prices that has existed over the past month is expected to continue. However, Mr. Perkins thinks that the dramatic price drop in September should be viewed as a short-term adjustment to the market rather than as a long-term, negative feature.

The American soybean crop is estimated at only 34 million tonnes which is 7.4 million tonnes less than last year and about 2.4 million tonnes lower than the figure initially estimated by the United States Department of Agriculture. Both domestic and export buyers are eagerly seeking the relatively tight supplies, and it is expected that the price will ration this demand to some extent.

Rapeseed has not enjoyed this price boom to the same degree that soybeans have because of the nature of its products. The current soybean price situation has

Cereal And Oilseed Outlook (cont'd)

been basically due to increased meal prices. The oil side of the sector is more critical to rapeseed, and it is in this area that conditions have been more uncertain and generally not as bright. However, oil prices have improved to between 20¢ and 22¢ per pound, which is much better than the 15¢ per pound of a few months ago.

These prices are expected to be sustained, particularly if the American government pursues its stated objective of aiding in the disposal of oil surpluses through food aid programs. On balance, therefore, rapeseed prices could return to around $6.20 and soybeans to $6.90, basis the futures market.

In fact, these prices could even be exceeded, particularly if the meal demand from Europe expands or if farmers remain firm in their tight holding policy. "With a rapeseed crop of 932,000 tonnes expected in Canada and good market prospects prevailing, rapeseed could again assume its Cinderella role in Prairie agriculture," Mr. Perkins says.

Flax prospects are also favorable because of the small North American crop. The Canadian crop is estimated to be only 307,000 tonnes compared with 444,000 tonnes last year, and the U. S. crop is expected to yield only 178,000 tonnes. Although demand is sluggish at the moment, prices should remain around $7.50, basis the futures market. However, the prospect for better prices is dampened somewhat by the likelyhood of a sharply increased Argentinian crop and good prospects for the Indian linseed crop.

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November 15, 1976

FOR IMMEDIATE RELEASE

HOG PRICE AND SUPPLY SITUATION

Canadian hog prices for the fourth quarter of this year are expected to average between the low $50 and the mid $40 levels. There will probably be some periods when prices will be in the low $40 level.

"Although the Canadian hog industry is expanding production very slowly, with most of any increase expected to be in Eastern Canada, the American hog industry is expanding rapidly and prices are dropping almost as fast, " says Maurice Kraut, marketing economist with Alberta Agriculture. "Areas of concern to Canadian hog producers, during this fourth quarter and into the first half of 1977, are the effect of pork imports, the beef supply, barley prices and U. S. hog prices."

Since mid-May Alberta hog prices have followed the U. S. price in both trend and magnitude even though the volume of hogs in the province is very low. Although prices could be expected to average higher in Alberta than in the U. S. and Eastern Canada, because of the relatively low supplies of domestic pork here, imports and reduced processor demand have eliminated most of the Western price advantage.

Mr. Kraut says, "As the year progresses it is becoming more evident that in 1976, Canada will be a net pork importer. Even with the projected increase in production for the fourth quarter, it is unlikely that the increase will be sufficient to overcome the accumulated trade deficit to date."

Preliminary trade statistics from Agriculture Canada show Canadian pork imports to September 25 increased 79 per cent to 122 million pounds, nearly all of which came from the United States. Alberta had imported more than 17 million pounds of pork by the end of September. Statistics also indicate that in the third quarter of this year Canada had imported more than 40 million pounds of pork or 95 per cent more than in 1975.

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Hog Price and Supply Situation (cont'd)

So far this year Canadian pork exports have declined by 10 per cent compared with last year. The export volume to the U. S. at nearly 66.7 million pounds is down 10 per cent from 1975. Overseas exports, mainly to Japan, totalled 47 million pounds, up 3 per cent from last year.

Canadian Supply Situation

With production costs for specialized hog operations running at around $50 to $55 per hundredweight, and off-quota barley selling slightly below the $2 per bushel level, it is unlikely that Western Canadian hog production will increase dramatically during the balance of 1976 or the first quarter of 1977.

Total Canadian pig numbers as of July 1 were about 4 per cent higher than they were in 1975. Based on the number of pigs under three months of age as a reflection of fourth quarter marketings, Canadian hog production in this fourth quarter should be up by 5 per cent compared with last year. The breakdown is 4 per cent for Eastern Canada, 6 per cent for Western Canada and 5 per cent for Alberta.

First quarter of 1977 marketings as reflected by July-September farrowing intentions show a 5 per cent increase for Canada. The increase in Eastern Canada is expected to be 5 per cent, in Western Canada it is expected to be 4 per cent and in Alberta it is predicted to be 5 per cent.

American Supply Situation

The September 1 United States Department of Agriculture survey for hog production, indicates a rapid expansion over the next six months. The number of hogs on farms is up 17 per cent compared with 1975, and fourth quarter marketings could be up by as much as 17 or 18 per cent compared with last year. These estimates point to a possible 4 to 5 per cent total increase in hog production this year compared with 1975.

Hog Price and Supply Situation (cont'd)

The first quarter of 1977 marketings as reflected by the light-weights could be up 18 per cent compared with the first quarter of this year.

"On the basis of current and anticipated price levels", says Mr. Kraut, "U. S. peak hog production could occur between next April and June. Canadian peak production could be in the May to June period. However, as most hog production comes from hard core operations, it is quite possible that there will be two production peaks in both countries. One could occur in 1977 and the other in 1978. Whether or not there are two peaks will depend upon the level of the total U. S. and Canadian meat supply and on the general state of their respective economics (consumer demand)."

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November 15, 1976

FOR IMMEDIATE RELEASE

PILOT PROJECT ON BONELESS BEEF PRODUCTION

Two years ago Alberta Agriculture's animal industry division embarked on a project to assess the feasability of producing boneless beef from steers grown to heavy weights on pasture and high roughage diets during the winter.

Up to 1974, Canada had been steadily increasing her boneless beef imports. In that year a 73 per cent increase was registered for the period January 1 to March 23 compared with the corresponding period in 1973. The reason for this situation was that too few boner cows and bulls in Canada and the United States were being marketed to fill the boneless beef trade.

Although very low beef prices depressed the boneless beef trade in the fall of 1974, it was decided to continue with the project to obtain information on the feasibility of growing beef cattle to heavy weights on high forage diets as a means of reducing production costs. Originally the project had been intended to provide information on the production of boneless beef from steers.

Four cattlemen in northern Alberta purchased or assigned 200 head of cattle between them to the project. The cattle were kept on the owner's farm. They were individually identified and weighed before going on to pasture in the summer of 1974. The following winter they were kept in a drylot on a high roughage ration. In the spring of 1975, they were put on pasture again until the following fall when most of them were sold directly off grass for slaughter. However, a few were put on a high energy diet in a drylot for varying lengths of time, and then sold for slaughter.

Individual weights were taken each time the cattle were moved off and on to pasture, and selling weights, carcass data and prices were recorded when the animals

- (cont'd) -

Pilot Project On Boneless Beef Production (cont'd)

were slaughtered. Records of costs and other 'inputs' were kept by each of the co-operating farmers. These varied from farm to farm due to a variety of circumstances.

The average weight of the cattle at the start of the projects was 699 pounds. The average weight when they came off grass in the fall of 1975 was 1,244 pounds. The average daily gains on grass were 1.15 pounds per head per day in 1974 and 1.6 pounds per head per day in 1975. Over the entire period the average daily gain was 1.09 pounds per head per day. Costs of gain on pasture ranged from $5.01 to $12.62 per hundredweight in 1974 and from $2.59 to $11.81 per hundredweight in 1975. These costs included pasture rental, annual cash costs and the cost of owning the pasture.

The purchase price of the cattle ranged from $41 to $44.06 per hundredweight. The average was $43.02 per hundredweight. Break-even prices varied from $36.37 to $40.04 per hundredweight. In those cases where the cattle were finished in a feedlot, the break-even price increased with the length of time in the feedlot.

Carcass data shows that the steers slaughtered directly from grass graded 71.8 per cent A1, 1.6 per cent A2, 23.4 per cent B1 and 3.2 per cent C1, while the animals finished in the feedlot for 50 days graded 48 per cent A1, 40 per cent A2, 4 per cent A3, 4 per cent B1 and 4 per cent C2.

Walter Dietz of Alberta Agriculture says, "Our experience with the project indicates that good quality steers can be grown to heavy weights on pasture and a high roughage diet and still produce a high percentage of carcasses in the A grade category. However, poor quality steers are less likely to gain sufficient finish to qualify for the A grade."

The use of pasture and high roughage rations is particularly important when grain prices are high relative to the price of beef. In fact, it is a way of keeping cash production costs low when cash returns from cattle are low.

November 15, 1976

FOR IMMEDIATE RELEASE

A BUSY YEAR FOR PAMI'S ALBERTA-BASED TEST STATION

During its first year of operation the Prairie Agricultural Machinery Institute's (PAMI) test station at Lethbridge has tested field sprayers, grain moisture meters, an experimental ultra-sonic discharge conveyor height sensor for potato harvesters and a vacuum conveyor for moving grain.

According to Ed Weins, senior engineer and officer in charge of the Alberta-based test station, six field sprayers were evaluated during the past summer. Five of them were production models presently being sold to farmers, and the sixth was a prototype sprayer. It was evaluated on a confidential basis for a Prairie manufacturer, and will probably be available to farmers next year with modifications recommended by PAMI.

Mr. Weins says the institute has just finished evaluating nine grain moisture meters. They were models currently being sold in Western Canada and are in the $200-price range; a price it was felt farmers would be willing to pay. Most of the meters were battery-operated so that they could be taken into the field for testing the moisture content of the grain.

The institute has also helped the Alberta Potato Commission to evaluate an experimental ultra-sonic discharge conveyor height sensor for potato harvesters. The purpose of the sensor is to keep the height of the discharge conveyor a constant distance above the potatoes in the truck box. Its height, relative to the potatoes in the truck box, is presently controlled manually. "If it could be controlled automatically, it would enable the operator to pay more attention to other aspects of the harvesting operation", Mr. Weins says. However, more work will be required to perfect the sensor".

At the present time an evaluation of a grain vac - u - vator is being completed

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A Busy Year For PAMI'S Alberta-based Test Station (cont'd)

at the test station. The vac - u - vator is a huge vacuum type conveyor, designed to move grain from one place to another. Mr. Weins says, " Many attempts have been made in the past to move grain by the vacuum principle, but this is the first commercially available farm versions I have seen".

The vac - u - vator evaluation will include data on its capacity, its power requirements and the degree of damage sustained by the grain through cracking.

Test result reports on the above equipment and machines will be available next spring. Farmers and others who would like to receive these reports should send their names and addresses to the Prairie Agricultural Machinery Institute, Lethbridge Community College, Lethbridge, T1K 1L6.

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November 15, 1976

FOR IMMEDIATE RELEASE

A NEW LINING FOR IRRIGATION SEEPAGE CONTROL

An estimated 15 per cent of the irrigated land in southern Alberta is now non-productive because of salinity and high water tables. About 75 per cent of the non-productive land has been caused by seepage from irrigation canals and ditches.

Although only about 4 per cent of the arable land in Alberta is irrigated, it produces approximately 20 per cent of the province's agricultural products. Hence, any reduction in its productivity represents a serious economic loss.

According to information received by Alberta Agriculture, the federal research station at Lethbridge has developed a material for lining irrigation canals and ditches which appears to stop this type of seepage under laboratory conditions. A total of 4,300 feet of irrigation ditches have now been lined with the material and are being tested.

According to Dr. Sommerfeldt, soil scientist at the research station, the lining is made by incorporating an anionic asphalt emulsion, bentonite (a clay material) and a wetting agent into the soil. Its positive features are that it can withstand flexing from frost action without cracking, herbicides can be incorporated into it for weed control and it is less expensive to install than concrete. Its main drawback is that it can be damaged by livestock because it it soft.

After having been applied, the material is incorporated into the soil by a specially built machine. In essence, the machine is a large drum-shaped rototiller that has been shaped to fit the canal. Following incorporation,the material is packed with a drum packer which is also the same size and shape as the canal.

If the lining proves to be effective in the field test, it is expected that the incorporator and the packer will serve as prototypes for machines that will be used for installing the new lining.

November 15, 1976

FOR IMMEDIATE RELEASE

ORDER BREEDER SEED NOW

Applications for obtaining cereal and oilseed breeder seed through the Canadian Seed Growers Association's (CSGA) Select Plot Growing Program must be received by Alberta Agriculture before December 31.

"To be eligible to enter the Select Plot Growing Program for the first time, an applicant must have had three out of five years of successful pedigreed seed production in the kind of seed for which he is applying," says Lydia Erickson, secretary of the Alberta Stock Seed Distribution Committee. Successful production means that the crop was approved by CSGA.

This year metric measurements will apply to CSGA's regulations. The maximum plot size for probationary growers will be half a hectare (about one acre). The minimum size will be a quarter of a hectare (about half an acre).

The maximum plot size for an established select seed grower will be one hectare (about 2 acres) for each kind of seed grown. Mrs. Erickson asks growers to be sure that they adhere to the metric measurements because inspections will be based on metric measurement.

Application forms for ordering breeder seed can be obtained from Mrs. Erickson. They, and any requests for additional information on the Select Plot Growing Program, should be sent to Mrs. Lydia Erickson, Secretary, Alberta Stock Seed Distribution Committee, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8, (Telephone 427-5348).

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November 15, 1976

FOR IMMEDIATE RELEASE

SUPPLEMENTARY LIGHTING FOR POTTED MUMS

Trials carried out at the Stockbridge Experimental Horticultural Station in North Humberside, England, has established that supplementary lighting can speed up the growth rate of potted chrysanthemums during the winter.

The experiment was carried out on a crop of Bright Anne chrysanthemums potted on November 27 of last year and given 12 hours of light every day for 14 days.

According to information received by Alberta Agriculture's horticultural branch, the first chrysanthemums were marketed on February 6 which was 13 days earlier than the first pots from the unlighted batch. However, the extra light did not appear to have any beneficial effect on uniformity, flower size or color.

In lettuce trials, also carried out at Stockbridge, artificial light is reported to save up to six weeks in propogation time. According to the scientists, it did not seem to matter much whether the source of light came from fluorescent tubes or sodium lamps. What appeared to be important was that the seedlings be given 11 days of illumination. Extending the length of illumination to 15 or 17 days did not justify the extra cost of electricity.

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November 15, 1976

FOR IMMEDIATE RELEASE

ORDERLY MARKETING IN THE BROILER INDUSTRY

A publication entitled "Orderly Marketing in the Alberta Broiler Chicken Industry" is now available from the University of Alberta.

The publication outlines the results of a study carried out at the university to examine various aspects of marketing broiler chickens and contains guidelines for improving broiler marketing and increasing the operational efficiency of the broiler industry.

Another aim of the study was to provide background information on the broiler market so that further research on expanding the demand for broiler chickens can be carried out. An attempt was made to identify areas where such research should be directed.

Copies of "Orderly Marketing in the Alberta Broiler Chicken Industry" can be obtained from the Agricultural Supervisor, Faculty of Extension, Corbett Hall, University of Alberta, Edmonton T6G 2G4.

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Alberta
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November 15, 1976

FOR IMMEDIATE RELEASE

FACTORS TO CONSIDER BEFORE BUYING A CARPET

There are five main factors you should consider when choosing a durable carpet, says Doreen Al-Adra, assistant clothing and textile specialist with Alberta Agriculture.

1) Density of Pile - the more dense the pile, the longer the wearing-life of the carpet. The pile should be dense enough to make it difficult for you to see the backing

2) Fibre Content - it should have good abrasion resistance. Nylon and polypropylene both have superior abrasion resistance. Wool, acrylic and polyester have good abrasion resistance. Rayon, acetate and triacetate have poor resistance to abrasion.

3) Backing - it must provide adequate support for the carpet pile so that the yarn does not come loose. Jute is a common backing which adds strength, weight and durability to a carpet.

Polypropylene is frequently used as a primary carpet backing and can be seen as shiny filaments when the carpet tufts are separated. Because polypropylene absorbs very little moisture, this fibre helps to prevent stains from penetrating the jute backing.

4) Latex Coating - a thin coating of latex helps to hold the tufts of yarn in place and prevents them from coming loose. However, a thick coat of latex is not a substitute for a firm backing.

5) Under Padding - it should maintain its resiliency for a good length of time. The underpadding absorbs some of the wear on the carpet and lengthens its life. It also adds buoyancy, giving a more luxurious feeling to the carpet, and absorbs sound.

In the area of price, a wool carpet is the most expensive and is generally long wearing. Acrylic is cheaper than wool and slightly more expensive than nylon. It is the synthetic fibre that most resembles wool in softness and the feeling of luxury. Nylon

- (cont'd) -

Factors To Consider Before Buying A Carpet (cont'd)

comes in many qualities and price ranges, and is generally an excellent choice for a medium-priced carpet that will give good wearability.

Polypropylene comes in several price ranges and is frequently blended with triacetate and sold under the trade name of Propylon. As well as being sold in the form of a medium-priced tufted carpet, polypropylene comes in relatively inexpensive carpets for indoor and outdoor use. A drawback to polypropylene is that it melts at a relatively low temperature. This factor should be considered in relation to cigarettes and children's friction toys.

Polyester carpets are back on the market and seem to be wearing well. Polyester is usually recommended for medium traffic areas.

Further information on carpets can be obtained from the leaflet "Facts on Buying Carpets" available from the publications office, Alberta Agriculture, Edmonton T5K 2C8.

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November 15, 1976

FOR IMMEDIATE RELEASE

AGRICULTURAL DEVELOPMENT CORPORATION APPOINTMENTS

Alberta's minister of agriculture, Marvin E. Moore, has announced two appointments to the Alberta Agricultural Development Corporation's board of directors. They are Art Rendfleisch of Edmonton and Paul Madge of Milk River.

Mr. Rendfleisch, a recent employee of the Alberta Department of Business Development and Tourism, is now a member of Alberta Agriculture's planning and research secretariat. His appointment to the board of directors fills the position previously held by another Alberta Agriculture staff member.

Mr. Madge is president of Madge Equipment Limited of Milk River, a farm implement dealership owned and operated by his nephews. He has served as counsellor and mayor of Milk River.

The two new appointments bring the membership of the Alberta Agricultural Development Corporation's board of directors to 11, including the chairman.

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November 15, 1976

FOR IMMEDIATE RELEASE

NEW HOME ECONOMICS AND 4-H DIRECTOR APPOINTED

C.J. McAndrews, Alberta Agriculture's assistant deputy minister for development, has announced the appointment of a director for the recently-created home economics and 4-H division. She is Irene Leavitt and her appointment becomes effective January 1, 1977.

As director of home economics and 4-H, Mrs. Leavitt will supervise the division's 80 professional home economists and 20 4-H specialists. She will be responsible for programs including farm and home management, family living, home economics and a variety of 4-H programs.

Mrs. Leavitt, a native of Prince Albert, Saskatchewan, has a farm background. She was involved in beef and grain 4-H clubs and was an award winner in the Farm Girls' Camps, which is associated in Saskatchewan with agricultural fairs.

Mrs. Leavitt is a B. Sc. (home economics) graduate of the University of Saskatchewan and worked for the university's extension division in 4-H programs both during her university years and after graduation.

She joined Alberta Agriculture in 1957 as district home economist for Claresholm, a position she held for two and a half years. In 1960 she married Ray Leavitt and moved to Calgary where she served as district home economist until 1973. She also acted as the regional program assistant for home economics to Calgary's regional director for a number of years.

Since 1973, Mrs. Leavitt has worked in rural development under the Small Farms Development Program, a joint project between Alberta Agriculture and Agriculture Canada.

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November 22, 1976

FOR IMMEDIATE RELEASE

FORECAST OF FARM OPERATING COSTS

A general cooling off of farm 'input' prices is foreseen for 1977.

Prices in Alberta are expected to increase by an average of only 5 per cent during the next 12 months compared with 13 per cent a year ago and 18 per cent between September 1974 and September 1975.

Hugh Bryce, head of Alberta Agriculture's statistics branch, says he is confident that the trend predicted for Alberta will apply across Canada even though the absolute price levels of farm 'inputs' in other provinces may vary.

Chemicals

The main herbicides are expected to show little price change a year from now due to good world supplies. Veterinary products will probably slightly exceed 1976 prices in response to expected improvements in the cattle industry.

Over the past two years the price of 2,4-D increased considerably, while the price of Avadex rose by 10 per cent in 1975 and by 2 per cent in 1976. Nominal increases were recorded for antibiotics and vitamins during the two-year period. These small increases were mainly due to the depressed cattle industry.

Credit

Between now and September 1977, the chartered banks' prime rate is expected to drop by half a per cent from its current rate of 10 1/4 per cent because of the lower demand for credit by farmers. With most commodity prices down from a year ago, and farm expenses continuing to rise, farmers are experiencing a tighter financial situation than was the case over the last two years. Consequently, they are reluctant to commit themselves to long-term payments at relatively high interest rates.

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Forecast of Farm Operating Costs (cont'd)

Feed

Assuming a fairly cold but not harsh winter, and an average crop in 1977, barley prices in September 1977 should be about the same as they are now. Hay prices will probably be slightly lower than present levels.

Slight increases are forecast for prepared feeds, mainly as a result of an expected 6 to 8 per cent rise in overhead costs. Ingredient costs to the feed industry in 1977 will be mostly the same or lower than they were this year. The one exception, meat meal, will probably go up in price. The prices of hog and chicken feeds will increase more than those for beef and dairy cattle rations.

Since 1974, the price of feed barley has declined but the price of hay has increased. However, the prices of most prepared feeds remained comparatively stable during the two-year period.

Feeder Cattle and Land

Feeder cattle prices are forecast to be about $5 per hundredweight higher in 1977 than they are now because of an anticipated decrease in cattle inventories and a general improvement in the meat situation. Land prices are expected to hold at current levels.

Over the past two years feeder prices have reflected the depressed cattle industry. However, land prices have risen considerably since 1972 because of higher grain prices, inflation and some influx of 'urbanites'. Even though grain prices have dropped recently, land prices have continued to increase due to a lag effect.

Fertilizers

A much smaller increase than that recorded over the last two years is forecast for ammonia fertilizer due to increased industry capacity. Phosphate fertilizers will probably decline slightly due to an expected decline in phosphate rock prices.

Forecast of Farm Operating Costs (cont'd)

Since 1974, the price of ammonia fertilizer has increased by an average of $32 per ton, while the price of phosphate fertilizer has risen by an average of $45 per ton.

Fuel

Further increases are expected in 1977, but at a lower rate than during the past two years.

Since 1974, farm gasoline and diesel fuel have increased by 10¢ per gallon, while propane has increased by 6¢ per gallon.

Labor

Labor rates are expected to increase again into 1977, but by a smaller amount than has been the case previously. The smaller increase is credited to a general cooling off of the economy and to the influence of the Anti-Inflation Board's rulings.

Since 1974, labor rates in Alberta have increased 10 to 20 per cent.

Machinery

Even though grain prices are declining and most farmers are now fully supplied with equipment, prices will probably go up a further 6 per cent across the board in 1977 as manufacturers adapt to increased overhead costs.

During the past two years farm equipment and machinery prices increased by an average of 17 per cent per year as grain producers attempted to fulfill their needs after several years of belt tightening.

Miscellaneous

Baler twine prices are expected to drop by $1 per bale, but much will depend upon the Mexican stockpile, which is thought to be large.

Antifreeze prices are expected to be about the same in September 1977 as they are now, but they will fluctuate between 50¢ and $1 per gallon, depending upon the season.

Forecast of Farm Operating Costs (cont'd)

Barbed wire prices are expected to remain stable due to a continuing moderate demand.

Truck tire prices will probably show a slight increase next year.

Bagged cement prices are forecast to go up slightly, mainly because of a reduction in the use of this product.

Lumber prices will probably have increased by 20 per cent in the spring and then dropped back to current levels.

Plywood prices are expected to increase by 5 to 10 per cent due to low supplies.

Paint prices will probably increase slightly.

Storage battery prices are forecast to increase 10 per cent.

Mr. Bryce obtained much of the information on which his forecasts are based from the Alberta Agricultural Input Monitoring Service, a joint project between Alberta Agriculture and Unifarm. Approximately 45 farm reporters throughout the province collect price and availability information on 39 main farm 'input' items on the first trading day of each month. The data is then compiled, analized and distributed to anyone interested in the information.

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November 22, 1976

FOR IMMEDIATE RELEASE

CUBED DEHYDRATED ALFALFA FOR DAIRY COWS

Establishment of forage dehydrating plants in Alberta has increased interest in dehydrated alfalfa as roughage for dairy cattle.

Preliminary trials carried out in 1974 and early in 1975 by the University of Alberta's dairy research unit on the consumption of alfalfa cubes by dairy cows were disappointing. Cows in the early stages of lactation tended to refuse the cubes (which were of poor quality) when they were offered as the sole source of roughage or as a complete feed containing 60 per cent alfalfa and 40 per cent concentrate. The result was a high proportion of 'off-feed conditions' associated with ketosis and reduced milk production.

Last fall a four-week trial was conducted to assess the feed intake of cows fed alfalfa cubes during all stages of lactation. Thirty-six cows were divided into three equal lots and received three different rations. The three lots were balanced as closely as possible for week of lactation, commencing from very early to late in the lactation period.

Lot 1 received chopped hay, fed free-choice twice a day and a concentrate fed twice a day, according to calculated National Research Council requirements. Lot 2 received chopped hay, fed free-choice, once a day and cubes fed once a day in an amount approximately equal to the amount of hay consumed. Grain was fed as in Lot 1. Lot 3 received chopped hay as in Lot 2 and cubes fed once a day free-choice. Grain was fed as in Lot 1.

Two cows in each of the cube-fed groups were removed early in the trial because they refused to eat any appreciable quantity of cubes from the beginning or after only a few days. However, more than 50 per cent of the cows in early lactation consumed the cubes satisfactorily.

The cows fed straight hay and those fed approximately equal parts of hay and cubes consumed similar amounts of roughage and concentrate and produced similar amounts of milk with the same composition of butterfat, protein and solids-non-fat.

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Cubed Dehydrated Alfalfa For Dairy Cows (cont'd)

The cows fed chopped hay and cubes free-choice consumed 14.7 per cent more roughage than the cows fed hay free-choice and than the cows fed equal parts of hay and cubes. Milk production increased very slightly, and the percentage of butterfat increased by 10 per cent. The higher roughage level also appeared to be associated with small increases in the percentages of protein and solids-non-fat in the milk.

One conclusion drawn by the scientists was that cubed dehydrated alfalfa can be successfully fed to lactating dairy cows to provide at least 50 per cent of their roughage. However, the cubes must be of a high quality, green in color and contain not less than 16 or 17 per cent crude protein.

A second conclusion was that cows in the early stage of lactation and at peak levels of production may refuse to eat cubes. Hence, they should be provided with an alternative source of roughage.

The third conclusion was that cubes, fed free-choice, with hay once a day increase total roughage consumption which is accompanied by slightly improved levels of butterfat, protein and solids-non-fat in the milk.

November 22, 1976

FOR IMMEDIATE RELEASE

BROILER INDUSTRY PROGRESS

Consumption of chicken meat has increased rapidly over the last 15 years until the average Canadian now eats more than 30 pounds of broiler meat a year.

It was the introduction of the broiler chicken less than 20 years ago that is responsible for this great upsurge in the consumption of chicken meat. Efficiency has always played an important part in broiler production as can be seen from the following broiler cost studies that were compiled by Alberta Agriculture's poultry branch.

	June, 1963	July, 1976
No. of Flocks	10	10
Total Birds	124,690	169,177
Average Days to Market	65	53
Livability	94.7 per cent	94.8 per cent
Feed Conversion	2.71 lbs	2.24 lbs
Average weight per Bird	3.51 lbs	3.87 lbs

The above table shows that the areas of real progress have been in the length of time to market, the feed conversion rate and the average weight per bird. These average figures show that from 1963 to 1975, days to market were reduced by almost two weeks, and that inspite of this shorter market period, producers are marketing birds that are a good one-third of a pound heavier than they were 13 years ago. The amount of feed required to put one pound of bird on the market has decreased by half a pound to 2 1/4 pounds, and in some flocks it has dropped to only 2 pounds.

Although the 5 per cent mortality level could be improved, there are two factors that must be taken into consideration here. First, the 2 per cent extra chicks most broiler growers receive with their order are included in the total placements. This means that a grower who markets 95 per cent to his total placements is

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Broiler Industry Progress (cont'd)

actually marketing 97 per cent of the chicks that he paid for.

In 1963 broiler growers were receiving 4 per cent free chicks, as opposed to the 2 per cent they now get. This means that the mortality rate has actually decreased by 2 per cent. The second factor is that many broiler growers market 97, 98 and even 99 per cent of their flocks, but, as most veteran producers know, there is the odd grower who has definite problems in his flock. Such a grower often ends up marketing only 88 or 90 per cent of his birds which, naturally, brings the industry average down.

At the present time the Alberta Broiler Growers Marketing Board is experimenting with a plan to reduce the growing cycle for broilers to nine weeks from 10 weeks. This would mean that a broiler grower would be able to put through 5.7 cycles a year instead of the present 5.2 cycles.

On a 10-week cycle, a grower who had a 6,000-bird barn operating at 100 per cent capacity and who had a livability rate of 95 per cent and marketed 3.85-pound birds would market 114,000 pounds of broiler a year. However, if the 'turn-around' time were reduced to nine weeks and all the other factors remained the same, he would be marketing 126,000 pounds of broiler meat a year, or an extra two pounds of broiler per square foot of broiler house per year.

The vital question is whether this nine-week cycle allows enough time for the broiler grower to clean up his premises properly and get ready for the new flock. Only the growers themselves can answer this question.

November 22, 1976

FOR IMMEDIATE RELEASE

PLANT DISEASE CO-ORDINATING COMMITTEE

Did you know that Western Canada now has an interprovincial committee to co-ordinate plant disease control? Established earlier this year, it is called the Western Committee on Plant Disease Control.

The committee is made up of representatives from Agriculture Canada, universities and the provincial governments of Manitoba, Saskatchewan, Alberta and British Columbia. It also includes research workers,extension pathologists and regulatory personnel from the four provinces.

At present the committee is busy compiling a list of well documented control measures for diseases that are important on a regional basis. This list, which will be up-dated at regular intervals, will serve as a valuable source of information for extension plant pathologists and as a basis for the preparation of provincial disease control recommendations.

Among the diseases that will be studied are those which affect vegetables, forage legumes, cereals, oilseeds, special field crops, grasses, potatoes, greenhouse crops, ornamentals, tree fruits, small fruits, trees and shelterbelts.

The co-ordinating committee will identify problems that require studying or control measures and will be responsible for alerting plant disease specialists within a specific region of a potential outbreak that is new to that area.

This regional approach to plant disease control became possible when Saskatchewan and Manitoba recently appointed provincial plant pathologists. These positions have existed in British Columbia and Alberta for a number of years.

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FOR IMMEDIATE RELEASE

ACCELERATED CAPITAL COST ALLOWANCE PROGRAM FOR POLLUTION CONTROL EQUIPMENT

Farmers as well as owners of industrial plants may be eligible for the 50 per cent straight line capital cost allowance on equipment installed to control air or water pollution.

Harry Warne of Alberta Agriculture's farm business management branch, says buildings and structural modifications to buildings that are an integral part of a farm's pollution control system as well as dams and dugouts used as lagoons or settling ponds in the pollution treatment process may qualify. However, the equipment and facilities must have been installed to eliminate a pollution problem that existed before December 31, 1974.

This special allowance applies to new pollution control equipment and facilities (as apposed to used equipment) acquired before January 1, 1977.

Applications for the capital cost allowance must be obtained from the Environment Protection Service, Environment Canada, 10th Floor, 10025 - Jasper Avenue, Edmonton, T5J 1S6.

They should be returned to that office before December 31, 1976, the date on which the program ends.

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FOR IMMEDIATE RELEASE

ALBERTA COMMUNICATIONS BRANCH WINS AWARDS

Alberta Agriculture's communications branch won two Awards of Merit (the highest award) in the 1976 Canadian Farm Writers competition, one Honorable Mention (the second highest award) and a number of ribbons.

One Award of Merit was won by "Agri-News" in the weekly release pack class,and the second was won by "A Japanese Adventure" for the outstanding agricultural news or feature release. Both entries were submitted by Diana Rodney.

The Honorable Mention award was given to the 1976 Agricultural Week press kit, prepared by Doug Pettit, Susan Mayse, Maryhelen Vickars, Judy Schultz and Ling Chang.

"Food Laboratory", a promotional piece submitted by Jo-Anne Willman and Garth Nielsen, won a white ribbon.

The communications branch won a red ribbon for their radio tape service,"A Look At Alberta Products", produced by Sue Bard, Susan Mayse and Bob Glanvill.

The closed circuit television feature, "Leisure With A Purpose", submitted by Doug Pettit, won a red ribbon.

The 1975 Agricultural Week television commercial, submitted by John Andrew, won a white ribbon.

The television feature, "Fact", co-hosted by Sue Bard and Noel McNaughton, also won a white ribbon.

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November 22, 1976

FOR IMMEDIATE RELEASE

CHOOSING A CARPET

Where do you start when choosing a carpet?

The initial step for most people is dictated by the color, texture and design of the carpet. The carpet you choose helps to set the mood of the room, whether it be informal, modern or traditional. A long shag, for example, is often used with a contemporary decor, while a carpet with a dense pile and a deep cushion underlay gives a feeling of warmth and luxury to the room.

Location is another factor that has an important bearing on choice. Abrasion resistance, for example, is not nearly as important for a bedroom that has very little traffic as it is for a living room or family room, which will get more wear. Stair carpets should be made of a fibre like nylon and should have a strong backing because they get the most wear of any carpet in the house.

The following is a summary, by Doreen Al-Adra, of the important characteristics of the main carpet fibres on the market today. Mrs. Al-Adra is assistant clothing and textile specialist design with Alberta Agriculture.

Wool - these carpets are the most expensive. They have good resilience and good abrasion resistance and are soft and luxurious to the touch. They also have good fire resistance which makes them a good choice for a room with an open fireplace. A possible disadvantage of wool carpets is that stains tend to penetrate the fibre more readily than they do a synthetic fibre. If you buy a wool carpet make sure that it has been mothproofed.

Acrylic - these carpets are less expensive than wool, but have many of the same characteristics such as good resilience and a soft touch. Their abrasion resistance is even better than that of wool. Acrylic carpets are easy to clean and more stain resistant than wool.

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Alberta

Choosing A Carpet (cont'd)

However, they tend to attract dust particles more readily than wool when the humidity in the room is low.

Nylon - these carpets are medium-priced, very durable and have excellent abrasion resistance. A possible disadvantage is that they have a high build-up of static electricity. This problem can be overcome, however, if you buy a nylon carpet that has a metal strand included in some of its tufts. If your nylon carpet does not have this metal strand, you can reduce the static electricity by keeping the humidity in the room high. High humidity also reduces the attraction of dust particles to the carpet. An anti-static spray will also reduce the build-up of static on nylon carpets.

Polyester - these carpets have a very soft, attractive appearance when new, and good abrasion resistance. However, they are more susceptible than any other synthetic fibre to oil stains. Polyester carpets are often recommended for medium traffic areas.

Polypropylene - these are low to medium-priced carpets and are a very good choice for an area where you want to have indoor-outdoor carpeting. The fibre has very good abrasion resistance and good resistance to sunlight and weathering. It also has good stain resistance and is easily cleaned with a mild detergent and water solution. Static electricity is not a problem because polypropylene has a built-in static control agent. One disadvantage is that the fibre melts at a low temperature, making it very susceptible to sparks and cigarette burns. A lot of friction from children's toys will also melt these fibres. Because polypropylene is not a resilient fibre, some carpets may tend to flatten. Hence, this fibre is more suitable for a carpet with looped rather than cut tufts.

Rayon - carpets made of rayon are quite inexpensive and of poor quality. They have no static electricity problem but they have poor abrasion resistance and a short "wear-life".

Choosing A Carpet (cont'd)

Triacetate - this fibre is usally blended with another fibre, the most common of which is polypropylene. This blend is sold under the trade name of Propylon. The triacetate fibre is inexpensive and has poor resilience, poor abrasion resistance and a short "wear-life". The Propylon carpet has a "wear-life" in between that of a triacetate and that of polypropylene.

Further information on carpets is contained in a leaflet entitled "Facts on Buying Carpets", available from your district home economist.

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November 22, 1976

FOR IMMEDIATE RELEASE

DISTRICT AGRICULTURIST APPOINTED TO NEW OFFICE

The director of Alberta Agriculture's extension division, John Calpas, has appointed Roland Witte to the position of district agriculturist at Eaglesham in north-western Alberta.

As district agriculturist at this new office, Mr. Witte will be responsible for co-ordinating and administering all Alberta Agriculture's programs in Improvement District 19. Previously served by the Falher and Spirit River offices, this district has more than 300,000 acres of cultivated land and more than 7,000 herds of cattle.

A native of Saskatchewan, Mr. Witte attended the University of Saskatchewan and graduated with a B. Sc. (agriculture) in 1970. His major was agricultural economics.

After graduation , he joined Alberta Agriculture's extension division as assistant district agriculturist at Barrhead. The following year he was appointed district agriculturist at Spirit River.

After five years of service at Spirit River, Mr. Witte was appointed senior district agriculturist at Medicine Hat where he remained until his present appointment.

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FOR IMMEDIATE RELEASE

THIS WEEK

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FOR IMMEDIATE RELEASE

CHANGES TO THE AGRICULTURAL DEVELOPMENT CORPORATION'S LENDING PROGRAMS ANNOUNCED

Alberta's minister of agriculture, Marvin Moore, has announced changes in various Agricultural Development Corporation (ADC) lending programs. These changes have been introduced to make ADC's lending programs more applicable to current farm credit needs and situations.

Of particular interest to persons wishing to enter the farming industry will be the amended Beginning Farmers Program and the new Father-Son Farmer Program. The Beginning Farmer Program, designed to assist potential farmers to develop a viable farming unit, will now provide maximum loans of $125,000 per individual for basic purchases of land, machinery, livestock and improvements. In addition, applicants may contribute a maximum of $50,000 in combined assets or cash.

When assessing an application for Beginner Farmers' loans, ADC will consider the vested interest of the applicant, the applicant's experience and training and the repayment ability of the proposed operation. Beginner farmers will continue to be eligible to receive a 2 per cent interest rebate on the outstanding principal balance for the first five years of the loan. This rebate is provided to encourage new farmers to establish and meet a farm plan and to comply with the terms and conditions of the ADC loan.

For some time ADC has been experiencing difficulty in financing father-son farming operations. The new program should significantly alleviate the situation. In cases where financing is not available from the Farm Credit Corporation and the total farm unit cannot repay ten-year guaranteed bank loans, ADC will consider providing term loans to a maximum of $100,000 per applicant, providing the father and son form a farming company, or partnership, or develop a formal working agreement. Security will be in the form of a mortgage on the land purchased or, if required, on land owned by the father. The term

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Changes To The Agricultural Development Corporation's Lending Programs Announced (cont'd)

of the loan will be a maximum of 20 years at an interest rate of the base ADC direct loan rate plus 2 per cent.

A new program has been introduced to provide for financial restructuring of a farm operation through the provision of direct loan funds. In cases where it can be shown that the ratio of short-term to long-term debt is out of balance, and is critically affecting the farm's viability because the annual demands for debt retirement require an exceedingly large percentage of net cash farm income, ADC will consider term financing.

This refinancing will be conditional upon the following restrictions: (1) funding provided by a specific guaranteed loan will not alleviate the financial imbalance, (2) there is ample land and building security, (3) the farmer has a favorable credit history, (4) conditions beyond the individual's control contributed to his present financial difficulty and (5) the individual has a history of good management of the financial and cultural aspects of his farm. These loans will be provided at the base loan rate plus one per cent and are available to a maximum term of 20 years.

Mr. Moore feels that these revisions and the introduction of new programs will significantly assist the farming industry in Alberta. New farmers will now find it easier to enter the industry and some established farmers will be given greater opportunities to continue their operations.

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November 29, 1976

FOR IMMEDIATE RELEASE

ADDITIONAL QUOTA FOR ALBERTA DAIRYMEN

Marvin Moore, Alberta's minister of agriculture, has announced that Alberta's dairy producers will receive additional allotments of market share quota (M.S.Q.).

The additional quota, recently made available by the Canadian Dairy Commission, will be distributed to producers by the Alberta Dairy Control Board. Alberta's allotment should be sufficient to cover the needs of most quota holders who are presently in difficulty. Producers will receive notification of the new quota by the second week of December. A specific restriction of the new quota is that it cannot be transferred during this dairy year. Subsidy will be paid on all shipments within the new quota.

The categories of individuals who will benefit from the additional quota are those whose current quota is less than their 1974-75 production, new producers who need additional quota and producers whose current production levels are such that they will have insufficient quota to carry them through to the end of the dairy year.

Effective immediately, the Alberta Dairy Control Board will discontinue deducting the over-quota levy on all milk and cream shipments. This will enable existing quota holders who are short or out of M.S.Q. to continue to deliver milk or cream without penalty. This over-quota levy will not be effective again this year unless Alberta's production increases to such an extent that it will exceed the provincial allotment. It should be understood that while over-quota shipments will not be subject to the over-quota levy, they will not be eligible at the present time for federal subsidy. It may become possible, however, for the dairy board to make such shipments eligible for subsidy prior to the end of the dairy year.

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FOR IMMEDIATE RELEASE

CWB ASKED TO RECONSIDER ORDER OUTLAWING GRAIN STORAGE TICKETS

The chairman of the Alberta Grain Commission, John Channon, has asked the chief commissioner of the Canadian Wheat Board (CWB) to reconsider the board's order which outlaws the use of grain storage tickets at primary elevators.

The board issued an order earlier this month to all primary elevator companies forbidding them to take delivery of open market feed grains for storage. The order stated that an elevator that takes feed grains must purchase them outright as soon as they are delivered.

The reason given by the wheat board for outlawing storage grain tickets is that farmers have been using storage tickets to get their feed grains into the elevator so that they can take advantage of wheat board quotas when they become available by transferring the grain to the board market.

Mr. Channon feels strongly that the prohibition order is unnecessary because we already have legal safeguards against abuses of storage tickets. He points out that there would be no problem if elevator companies obeyed the rules laid down by the CWB. Under these rules there is no legal way that a farmer can switch his storage ticket grain from the open market to the wheat board market.

Wheat board officials have also complained that stored feed grains are 'plugging' the elevators and preventing farmers with board grain from delivering it. Mr. Channon refutes this complaint by pointing out that the amount of open market feed grain in the Alberta elevator system is limited by the wheat board and the Canadian Grain Commission to 10 per cent of the total elevator capacity. "We have in Alberta," he says, "130 million bushels of elevator space which means that open market feed grains are legally entitled to 13 million bushels of space. However, the delivery level has hovered

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CWB Asked to Reconsider Order Outlawing Grain Storage Tickets (cont'd)

around the 3 million bushel mark for sometime now, and has never remotely approached the 13 million bushels allowed."

Mr. Channon believes that storage tickets are a necessary device in the open grain marketing system. With a storage ticket, a farmer can deliver his grain when it is convenient for him to do so, and he can choose the price at which he wishes to sell as well as the buyer to whom he wishes to sell. Without a ticket, he can only deliver his grain when he has a buyer, which leaves him no room for price negotiation.

In view of the above factors, Mr. Channon is hopeful that the chief commissioner of the CWB will withdraw the board's storage prohibition order and restore the farmer's right to deliver his open market grain on storage tickets.

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November 29, 1976

FOR IMMEDIATE RELEASE

WHY ANTIBIOTICS OFTEN FAIL

It worked before, why doesn't it work now?

Many livestock owners who treat an animal with an antibiotic which was successful on a previous occasion, for what they consider to be the same disease, are puzzled and disappointed when they do not get the same good results.

Why should an antibiotic that previously worked wonders now fail to live up to its past performance? Chances are that it is not the antibiotic, but the person administering it that has failed. Antibiotics are not effective against non-infectious diseases and they are not effective against many infectious virus diseases.

According to Alberta Agriculture's beef cattle extension veterinarian, Dr. Frank Baker, there are many reasons why an animal fails to respond to antibiotic treatment. However, the most common is that a correct diagnosis was not made, with the result that the appropriate treatment was not given.

Too often a livestock owner thinks that a current disease is the same as that experienced on a previous occasion. Only after treatment fails does he find out that the diseases, though similar, are different and require different treatment.

"Diagnosis of such diseases," Dr. Baker says, "requires the skill of a veterinarian who is trained in diagnostic procedures, and who has laboratory aids and facilities to help him make a correct diagnosis." Such a person is trained in the best methods of treating and controlling animal diseases.

Even after a correct diagnosis has been made, treatment without veterinary supervision often fails. In these cases, failure may be due to an incorrect dosage of an antibiotic or other drug or to the overwhelming effect of an additional stress factor. Examples of additional stress factors include a concurrent parasitic infection and a nutritional deficiency, either of which can prevent the proper treatment of the primary cause of the disease from

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Why Antibiotics Often Fail (cont'd)

being successful. On the other hand, a veterinarian takes these things into consideration when recommending treatment.

There is another reason antibiotic treatment sometimes fails after having worked under similar circumstances in the past. It is because the bacteria causing the disease have developed a resistance to the antibiotic through previous exposure. This type of situation occurs more often with diseases like calf scours and mastitis.

The indiscriminate use of antibiotics, often on the assumption that "if it doesn't do any good, it won't do any harm" has now lead to the development of some bacterial strains that are resistant to certain antibiotics. In fact, scientists have made the alarming discovery that this characteristic, in addition to being transferred from one generation to another, can be transferred from one species of bacteria to another.

Some animal scientists are already afraid that this resistance phenomenon may signal the end of the effectiveness of our present antibiotics. Unless we can continually develop new ones that can be used economically, the future treatment of animal diseases will be expensive and difficult.

"So don't take chances with your livestock or the future of the livestock industry, " says Dr. Baker. "Work with your veterinarian where animal health is concerned."

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November 29, 1976

FOR IMMEDIATE RELEASE

VITAMIN A FOR RUMINANTS

Are you feeding a vitamin A supplement to your cattle and sheep? "If not, you should consider it," says Ruth Berg, animal nutritionist with Alberta Agriculture.

Both these ruminants get their daily supply of vitamin A from a green pasture, when one is available, and are even able to store this vitamin for a short time. If, however, your animals have not seen a green pasture for the last three months, the chances are their store of vitamin A has already been used up.

According to Ms. Berg, vitamin A is important for good eyesight and for maintaining healthy tissues in the digestive tract, the reproductive tract, the lungs, the eyes and the skin. Night-blindness, the birth of blind or dead offspring, poor growth, general unthriftiness and an increased susceptibility to disease, are all symptoms of a vitamin A deficiency. Susceptibility to disease can lead to scours and reproductive failure.

Cattle and sheep can get vitamin A in the form of carotene from green forage. However, the greenness of the forage is not necessarily an indication of its level of carotene. Because its availability and stability varies in feeds, Ms. Berg says carotene should not be relied upon to meet an animal's total vitamin A requirements. She recommends giving a synthetic vitamin A supplement to all cattle and sheep that are not on a green pasture. Ideally, the supplement should also contain vitamins D and E.

The most common ways of supplementing vitamin A are to inject it into the animal and to mix the dry form with the grain portion of the ration, salt or other minerals.

Ms. Berg stresses that the injectible form is not a vaccination. The injection must be repeated when the stored vitamin is used up. Depending upon the amount given, the vitamin A could last up to three months.

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Vitamin A For Ruminants (cont'd)

If you feed it with grain, salt or minerals, mix only enough to last one or two weeks. Exposure to moisture and minerals, and a prolonged exposure to air, can destroy vitamin A.

Always read the label carefully before using any vitamin supplement. An incorrect dose may be ineffective and can even be toxic. Your provincial nutritionists, and your district agriculturist, regional livestock specialist and feed company representative can recommend the correct level of vitamin A supplementation for your animals.

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CORRECTION: The last paragraph of the article entitled "District Agriculturist Appointed" (November 22 issue of Agri-News") should read "Previously served by the Falher and Spirit River offices, this district has more than 300,000 acres of cultivated land and cattle herds exceeding 7,000 head. NOT "more than 7,000 herds of cattle" as stated in the article.

November 29, 1976

FOR IMMEDIATE RELEASE

CUSTOM RATE GUIDE FOR FARMERS

Farmers who are preparing their bills for custom work, done during the past season, or who are making their plans for next year, could find the following custom rate information helpful. Compiled by the Agricultural Input Monitoring System (AIMS), a joint computer project between Unifarm and Alberta Agriculture, the information is intended as a guide for arriving at fair custom rate charges. The charges quoted are commercial rates, not good neighbor rates.

Straw Baling - conventional square bales

20¢ to 25¢ per bale.

These rates include the tractor, baler, twine and operator.

Straw Baling - large round bales

$2 to $2.50 per bale for 500 to 700-pound bales.

$3 to $4 per bale for 800 to 1,200-pound bales

$6 for 2,000-pound bales.

These rates include tractor, baler, twine and operator.

Loose Straw Stacking

Stack in the field - no hauling

$8 for a 2-ton stack.

$10 for a 3-ton stack.

$12 for a 4-ton stack.

Stack Moving - field to storage area

$7 to $8 for a 4-ton stack - up to one mile round trip.

Stacking and Moving

$25 to $30 an hour.

These rates include tractor, stack former and operator.

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Custom Rate Guide For Farmers (cont'd)

Straw Bale Stacking

12¢ to 15¢ a bale for a maximum one mile round trip from field to storage area. When the haul exceeds one mile, the rate is often quoted at an extra 1¢ to 1 1/2¢ per bale per mile. Some operators charge $20 per hour for a 104-bale capacity bale wagon, tractor and operator hauling a maximum one-mile round trip. When the distance exceeds one mile, some operators charge an hourly rate for the whole operation. It ranges between $25 - $30 per hour. The above rates include all equipment required for picking up and stacking the bales plus an operator.

Pasture Rental - privately owned land

Native Pasture

$2.50 to $4.50 per animal unit month (AUM), depending upon pasture quality. Some farmers charge 10 1/2¢ per day while others charge $12 to $15 per season.

Tame Pasture

$5 to $8 per AUM, again depending upon pasture quality. When the rate does not cover salt and other minerals, an extra $10 to $12 per animal unit season is sometimes charged to cover these items.

Water, fence maintenance and land taxes are provided or paid by the landlord.

Post Hole Auger and Driver Rental

Auger Only

$15 to $20 a day or $75 a week.

The auger, tractor and operator rate is $14 an hour.

Driver Only

$20 to $25 a day or $100 a week.

The driver, tractor and operator rate is $13.80 to $14.50 an hour.

Custom Rate Guide For Farmers (cont'd)

Appropriate-sized Tractor

The rate ranges from $20 to $30 a day.

The next custom rate survey results released by AIMS will be on land clearing. They are expected sometime in the new year. Results of a custom rate survey on swathing, combining, grain handling, grain drying, mold-board plowing and cultivating were released in September. This information can be obtained from Alberta Agriculture's farm business management branch.

Other guides which Alberta farmers can use to set custom rates include the CANFARM computerized 'Buy versus Hire' program, available from district agriculturists; the new publication "Farm Machinery Costs, 1976" and "Farm Machinery Costs as a Quick Guide to Custom Rates, May 1976". The publications are available from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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November 29, 1976

FOR IMMEDIATE RELEASE

M-DAY FAST APPROACHING

February 1, 1977 is M-Day or the day Canada's grains, feed and seed industries convert to the metric system.

According to George Calver, chairman of Alberta Agriculture's Metric Committee, grain trucked to an elevator on M-Day will be weighed in kilograms or 1,000 kilogram units which is the tonne.

On M-Day area measurements will be recorded in hectares and yields and quotas in kilograms per hectare. The bulk density of grain will be in kilograms per cubic metre and volumes will be measured in cubic metres.

Mr. Calver says the grain industry will use a 'test weight' term which will be stated in kilograms per hectolitre--a hectolitre is one-tenth of a cubic metre.

Details on metric grain measurements are contained in a fact sheet entitled "Metric Units for Grain Farmers". It is available from the publications office, Communications Branch, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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November 29, 1976

FOR IMMEDIATE RELEASE

'WOUNDED' TREES

An unsightly or hazardous tree does not just happen -- it is usually the result of improper care or neglect.

The time to begin caring for a tree is while it is still healthy -- long before it becomes unsightly or hazardous. A publication entitled "Rx for Wounded Trees" explains what happens inside a tree that has been 'wounded' and describes how to recognize, prevent and to minimize the decay that so often sets in.

Compiled by the United States Department of Agriculture's forest service, the publication contains 71 colored illustrations which show examples of common tree problems and how to correct them.

Herman Oosterhuis, in charge of Alberta Agriculture's shelterbelt tree planting program, highly recommends "Rx for Wounded Trees" to parks maintenance personnel and to anyone else who is concerned about keeping his trees healthy and prolonging their lives.

"Rx for Wounded Trees" (AIB-387) can be obtained from the Superintendent of Documents, United States Government Printing Office, Washington D.C., 20402, for a $1.35 money order.

Other books in the U.S. forest service include "Your Tree's Trouble May Be You" ($1.30) and "A Tree Hurts Too" (90¢).

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November 29, 1976

FOR IMMEDIATE RELEASE

CARPET TEXTURES

What features should you look for when choosing a specific carpet texture? Doreen Al-Adra, assistant clothing and textile specialist with Alberta Agriculture, gives the following tips on the important features of six types of carpets on the market today.

Shag

Since the wear on a shag carpet is on the sides of the tufts rather than on the ends, the fibres in the tufts must stand up to hard wear. Nylon is recommended for shags because it has the best abrasion resistance of any fibre on the market.

When choosing a shag, check to see that the tufts are tightly twisted and are not unwinding at the ends. The more tufts there are in the carpet (the greater the density), the more durable the carpet will be.

A short shag is easier to clean than a long shag. A good suction (cannister) vacuum cleaner is recommended for shags. A cannister vacuum cleaner is specially important for a long shag because an upright vacuum cleaner tends to pull out the long tufts. Shag rake attachments, available at many department stores, can be adapted to fit any model of cannister vacuum cleaner. These attachments have suction holes at the tips of the rake teeth which direct the suction more deeply into the carpet tufts to remove grit etc.

Plush

Because plush carpets are inclined to show foot prints, a good dense pile which bounces back after having been walked on is important. If the carpet is going to be in an area where it will get a lot of wear, the abrasion resistance of the fibre is also important. Wool and acrylic both have good resiliency and abrasion resistance.

Plush carpets are easy to clean with an upright vacuum cleaner. However, if they are a solid color, they tend to show lint and are subject to shading.

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Carpet Textures (cont'd)

Shag-Plush

A shag-plush carpet is a combination of the shag and the traditional plush carpet. It attempts to combine the most desirable features of both. When buying a shag-plush carpet, make sure that it has a dense pile. The more tufts there are on the surface of the carpet, the longer the carpet will wear. The abrasion resistance of the tufts is also important because the sides of the tufts receive the most wear. Nylon is often recommended for shag-plush carpets.

An upright vacuum cleaner can be used if the carpet is a short shag-plush. If the shag is long, a cannister-type vacuum cleaner should be used.

Hard Twist

The tufts in this carpet are tightly twisted and heat set to increase resiliency and durability. It wears well, hides footprints and is easy to clean with either an upright or cannister vacuum cleaner.

Looped

These carpets are available in level or multi-level types. The level loop texture wears very well, hides footprints and is easy to clean. The multi-level types do not show dirt as readily as the level carpets, but are slightly more difficult to clean. Either an upright or a cannister vacuum cleaner can be used on these carpets.

Sculptured

In these carpets the pile tufts are sheared at different heights to form a design. This type of carpet hides footprints and dirt well, but is harder to vacuum than a level pile because grit and other particles often become lodged between the different pile heights. Either an upright or cannister vacuum cleaner is suitable for these carpets.

Further information on carpets can be obtained from the leaflet "Facts On Buying Carpets", available from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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December 6, 1976

FOR IMMEDIATE RELEASE

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December 6, 1976

FOR IMMEDIATE RELEASE

GOVERNMENT RELEASES RAPESEED STUDY

Western Canada's rapeseed processing industry makes significant contributions to the Canadian economy in employment, export earnings and import reductions.

These are the findings of the "Economic Review of Western Canada's Rapeseed Processing Industry," a report just released by a joint committee of the five major rapeseed processors in Western Canada and the governments of Alberta, Saskatchewan and Manitoba.

"The Alberta government was pleased to co-operate in preparing this rapeseed report and was especially satisfied to find that $3 of value added processing accrued to every bushel of rapeseed crushed by Western Canadian processors," says Alberta Minister of Agriculture, Marvin E. Moore. The national rapeseed crop for 1976 is estimated to have exceeded 40,000,000 bushels.

"We've also taken note of the report's conclusions on restrictions to realizing full market opportunities," Mr. Moore adds.

"This vital study represents a novel approach to industry reviews," Alberta Transportation Minister, Dr. Hugh Horner, says. "It's one of the few times industry and government have worked together and produced a factual report without getting involved in jurisdictional disputes or attempting to draw conclusions without a basic industry appraisal."

The report prepared by Peter Perkins of Alberta Agriculture, drew on both industrial and government information sources. The report was written for the governments of the three prairie provinces and the five rapeseed processors: CSP Foods Ltd., Canbra Foods Ltd., United Oilseed Products Ltd., N.A.R.P. Co-op Ltd. and Alberta Food Products Ltd.

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Government Releases Rapeseed Study (cont'd)

The review considers all aspects of the rapeseed industry, from its history to its future potential. Although it does not make recommendations, it does highlight several present obstacles to fully achieving existing production capacity.

The study is organized in three sections. The first considers the background of commercial Canadian rapeseed production and processing from its birth in 1943 to the present time.

Market opportunities comprise the major portion of the report. Industry growth is projected to 1980, and considerable attention is given to rapeseed product substitutability for soybean based products. The review concludes that oils from the two crops are now fully interchangeable and that the meals will have equivalent quality characteristics within the next five years.

However, the report finds "a distressing paradox in the Canadian oilseeds business. Canada is a net exporter of the less valuable oilseed, and a net importer of the more valuable oilseed products." It points out that the full extent of this situation is unnecessary. Current crushing capacity in Western Canada could produce approximately three times more rapeseed oil and meal, and thus reduce the need for imported soybeans and soybean products.

"But," the report continues," competitive access to the Eastern Canadian market is fundamental to correct this present trade imbalance. Current anomalies in the freight rate structure preclude this necessary competitive access."

The third section of the report deals with restrictions to realizing full market opportunities. Considering the current difference in rates for rapeseed and rapeseed products, it is clearly demonstrable that the nature of the competition in this business necessitates that the freight rates for moving the seed and the seed products be approximately equivalent.

Government Releases Rapeseed Study (cont'd)

The report reveals that Western Canadian crushers lost an estimated $4.6 million in 1975 as a direct result of higher freight rates on rapeseed products. It states "of more critical importance is the estimated $13.7 million that will be lost annually if the current rates remain and all plants in Western Canada crush to efficient capacity."

This loss represents an estimated 44 per cent of the earning potential for this industry and is directly attributable to the different rate schedules which must be borne by the rapeseed crushers. A revision in these freight rates is necessary in order for Canada to enjoy the full benefit of the rapeseed production and processing industry.

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December 6, 1976

FOR IMMEDIATE RELEASE

ALBERTA'S SOLONETZIC SOIL STUDY

A qualified soil specialist should always examine the chemical and physical properties of a solonetzic soil before it is deep plowed.

This is one of the conclusions reached by those carrying out the Deep Plowing Feasibility Study, embarked on by Alberta Agriculture's soils branch in 1973,to test research data under field conditions.

Solonetzic soils, often referred to as blowout or gumbo soils, restrict crop growth because the hardpan that forms in them restricts moisture and root penetration. This hardpan layer can be anywhere from two to 12 inches below the soil surface.

The hardpan forms when a high percentage of sodium ions on the clay particles cause the particles to disperse and form a hard, impermeable layer in the soil. Soil researchers have known for years that if most of the sodium on the clay is replaced by calcium, a more desirable and permeable soil structure results. This situation can be achieved by adding calcium to the soil as a surface amendment or by bringing calcium salts, such as gypsum or lime, which occur naturally under the hardpan layer of many solonetzic soils, to the surface and mixing them with the hardpan layer through deep plowing.

John Hermans, soils specialist with Alberta Agriculture, reports that sites used in the solonetzic soil study were picked on many different types of solonetzic soils and in different agro-climatic zones so that the possible benefits of deep plowing could be evaluated under the variety of conditions that occur throughout the province.

The plots are located in areas which have the highest percentage of solonetzic soils and extend from Chipman, north-east of Edmonton, through Vegreville,

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Alberta's Solonetzic Soil Study (cont'd)

Coronation and Hanna down to the Brooks area. Ten counties, three special areas and one municipal district are involved in the study.

After the plots have been plowed, they are farmed in the same way as the rest of the field so that the effectiveness, and the economic feasibility of deep plowing, can be evaluated under normal farming conditions. Those carrying out the study have to rely heavily on the farmer on whose land the plot is located and on the agricultural fieldman and district agriculturist involved to provide accurate yield data on the deep plowed area and the rest of the field. Alberta Agriculture personnel also take soil samples so that any chemical or physical changes in the soil, after it has been deep plowed, can be recorded.

Over 120 sites of approximately 10 acres each have been deep plowed in the last three years. Only a few additional sites will be needed for testing new plow designs and to further evaluate specific soil types. "We hope", says Mr. Hermans, "to concentrate our main effort on several of the representative sites to establish base-line information on the soils and to study, in more detail, some of the problems which have been encountered.

An example of some of these problems are areas of poor germination, encountered on many test plots. Mr. Hermans says, "In most cases these areas appear to correspond to the areas of poor growth before the plot was deep plowed." The half to one-inch blocky -shaped soil particles left on the surface after the ground has been deep plowed forms a poor seedbed and does not hold enough moisture for a crop to germinate. Another problem is that the surface material breaks down easily under a light rainfall and forms a heavy crust which prevents additional moisture from penetrating the soil and restricts or retards the emergence of germinating seedlings. "However, if the seed does germinate in these areas, crop growth appears to

Alberta's Solonetzic Soil Study (cont'd)

be much better than before it was deep plowed," Mr. Hermans says.

A new plow has now been developed by Alberta Agriculture's engineering field services branch and the engineering research service of Agriculture Canada in an attempt to minimize some of the germination problems by saving most of the topsoil. Although the plow is still in the experimental stage, results to date are very encouraging. More tests will be carried out in the future.

According to Mr. Hermans, results from many of the sites which have been deep plowed are also very encouraging, but he stresses that there is still not enough information to determine the long-term effects on the soil and the economic feasibility of deep plowing. "It is known," he says, "that some soils do not lend themselves to deep plowing and that they may even be put out of production for several years if deep plowed." Saline, discharge areas and low, wet spots should never be deep plowed. However, information currently available indicates that between one and 2 million acres of the estimated 12 million acres of solonetzic soils in Alberta (approximately 30 per cent of the arable land in the province) could benefit from deep plowing.

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December 6, 1976

FOR IMMEDIATE RELEASE

FOOD FOR THOUGHT

By
G. Mazza
Food Scientist
Alberta Horticultural Research Center, Brooks

Food additives is a subject which is rapidly being 'done' to death. Hardly a week goes by without colors, antioxidants, preservatives, acidulants, flavors, phosphates, or sweetening agents making headlines — headlines that warn the public about dangerous substances used in foods.

Food additives may be good for sensational headlines in newspapers, radio or television, but the fact is that the hazards from additives are infinitesimal compared with the risks associated with the foods of years ago. Food is safer today than it has ever been. Our food supply is the best, the most nourishing, the tastiest, the most diversified and the most wholesome in the world.

The food industry could make foods with fewer additives. But there would be far less variety in what is available to eat; the food would cost more; it would be lower in quality; it would be less nutritious,and, to top it all off, it would not be any safer.

We need and depend on food additives. Consumers demand high quality, economical, convenient food. Yet, the very agents - additives - that helped provide high quality food at low cost are under heavy attack.

In January of this year, the United States Food and Drug Administration banned Red dye No. 2 In February, questions arose over the safety of Red No. 40. In March, Orange B came under attack, and in April some allergists believed that Yellow No. 5 may cause reactions in certain patients.

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Food For Thought (cont'd)

Table salt and sugar are labelled dangerous. Some faddists even think that sugar kills you on contact! Are we going to ban sugar and salt too? Not yet. But, watch out, food faddists - and those with personal economic interests in undermining confidence about sugar and salt - might try to talk our politicians into doing so.

Too few consumers and consumerists know much about food science. They are sincerely afraid of chemicals in foods, not realizing that all foods are chemicals, as are their own bodies.

What would you say if the next time you stopped at your best friend's house, he or she offered you a hot steamy solution which contained, among other things, essential oils, methanol, caffeine, acetaldehyde, methyl formate, ethanol, dimethyl sulfite, propionaldehyde, acentone, methyl acetate, furan, diacetyl, butanol, methylfuran, isoprene, methylbutanol? You would probably think he is trying to kill you. Well, he isn't. He is just offering you a cup of coffee.

Consumers demand that their foods be absolutely safe, and who can blame them. But the fact is that absolute safety does not exist. I am sure you realize that while you are reading this article the roof (if you are inside) may fall on your head. Are you going to stop reading (eating)?

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December 6, 1976

FOR IMMEDIATE RELEASE

LOUSE CONTROL RECOMMENDATIONS FOR BEEF AND DAIRY CATTLE

Alberta Agriculture's entomologist and pest control specialist, Michael Dolinski, urges beef and dairy cattle owners to check their animals for lice.

He points out that lice on both beef and dairy cattle are becoming a problem earlier than usual this year and that animals that were treated for warbles last fall should also be checked. Although warble control systemics kill lice, they do not kill the eggs, many of which will have hatched by now.

"Since some animals in a herd can be heavily infested with lice, while others have only a few, it is important to check the whole herd," Mr. Dolinski says. "A weak or unthrifty animal is often a sign that the cattle have lice."

Since lousy animals spend a great deal of time scratching and rubbing instead of feeding, young animals often gain a half to three-quarters of a pound a day less than those that are louse-free. Calves with a high louse population do not usually gain normally either.

A long-lasting, heavy louse infestation on older cattle lower their vitality and can reduce their red blood cells to the point where the animal becomes anemic. Such animals are unable to withstand any unusual stress or exertion. They frequently become victims of cold weather, shipping fever and diseases that a healthy animal is easily able to withstand.

The following table, compiled by Mr. Dolinski, shows the insecticides that are recommended for louse control on both beef and dairy cattle and gives information on their use.

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INSECTICIDAL CONTROL OF LICE ON CATTLE

Insecticide	Formulation of Insecticide	Method of Application	Amount of Mixture per Animal	No. of Applications and Timing	Use On Beef Cattle	Use On Dairy Cattle	Precautions and Limitations
Carbaryl (Sevin)	Wettable powder	High pressure spray.	1 gal.	One when necessary	Yes	Yes	Do not use one week before slaughter.
	Dust	Hand	1 lb.	As required, not more than twice a week. Repeat in 14 days.	Yes	No	Apply to dairy cattle after milking.
Crotoxyphos-Dichlorvos (Ciovap)	Oil solution ready-to-use	Backrubber	-	Continuous	Yes	Yes	
Crotoxyphos (Ciodrin)	Emulsifiable concentrate	High pressure spray.	1/2 - 1 gal. Less for smaller animals.	As necessary, not more than once every 7 days.	Yes	Yes	Do not treat calves under 6 months of age.
	Emulsifiable concentrate	Backrubber	-	Continuous	Yes	Yes	Do not use crank case or used oil.
	Dust	Hand	1 - 2 oz. for small animals. 2 - 4 oz. for large animals.	One. If necessary retreat in 2-3 weeks.	Yes	Yes	Brahman cattle are more susceptible to toxic affects than other breeds.
Crufomate (Ruelene)	Emulsifiable concentrate	High pressure spray.	1 gal.	One. Wait 28 days before repeat treatments when these are necessary. Not in Dec. Jan. Feb. unless animals were treated for warbles in fall.	Yes	No	Do not apply to calves under 300 lbs. Do not apply within 7 days of slaughter or within 3 days of freshening.
Lindane	Wettable powder or Emulsifiable concentrate	High pressure spray.	1 - 2 gal.	As required at 2-3 week intervals.	Yes	No	Do not treat within 30 days of slaughter. Do not treat animals under 3 months of age. Do not use around dairy barn or milking parlours.
Malathion	Wettable powder or Emulsifiable concentrate	High pressure spray.	1 gal.	One. Repeat if necessary.	Yes	No	Do not use within 14 days of freshening. Do not use on calves under one month of age. Avoid treating eyes.

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Insecticidal Control of Lice On Cattle (cont'd)

Insecticide	Formulation of Insecticide	Method of Application	Amount of Mixture per Animal	No. of Applications and Timing	Use On Beef Cattle	Use On Dairy Cattle	Precautions and Limitations
Malathion (cont'd)	Dust	Thoroughly by hand.	-	Repeat in 10 days and thereafter as required any time of year.	Yes	No	ears and nose. Do not apply to animals nursing young.
	Solution ready-to-use	Backrubber	-	Any time of year.	Yes	Yes	No restriction to slaughter or freshening.
Pyrethrum	Solution ready-to-use	Aerosol	2 - 3 sec.	Daily as required.	Not economical	Yes	
	Solution	High pressure spray.	1 gal.	Two treatments 2 weeks apart.	Not economical	Yes	
Ronnel (Korlan)	Emulsifiable concentrate	High pressure spray.	1 gal.	As required.	Yes	No	Do not treat young calves nor animals within 7 days of slaughter.
Rotenone	Wettable powder	High pressure spray.	1 gal.	Twice 12-16 days apart.	Yes	Yes	
	Dust	Hand	Visible coverage	Three treatments 1 week apart.	Yes	Yes	

This table does not include all the required precautions and limitations. Read the label and follow directions carefully.

December 6, 1976

FOR IMMEDIATE RELEASE

UNIQUE EXTENSION PROGRAM

Starting in the new year, Alberta Agriculture's plant industry division, in co-operation with the University of Alberta, will be providing practical indepth information in four regions of the province on weed control, forage, soils and acreage agriculture via direct mailing and the communications media.

In essence, this unique extension program consists of home-study courses supplemented by radio and television programs. Each course is from eight to 10 weeks long and is limited to 1,000 participants, chosen on a first come, first serve basis. The cost is $15 per student.

Two to three weeks before a course starts, there will be a daily 15-minute radio program, designed to give an overview of the material to be covered. Local radio stations and newspapers will carry the dates and times of the programs.

The weed control course starts in early January and will be held in the Peace River region. It will cover weed ecology, weed identification, weed control practices and the safe use of herbicides.

The forage course begins in the middle of January and will be held in the Barrhead region. It will provide indepth information on all the main aspects of forage production and use.

The soils course starts at the end of January in the Red Deer area. It will cover the physical properties of soil; soil formation and fertility; fertilizer use; saline, acidic and solonetzic soil problems; soil conservation principles and soil testing.

The acreage agriculture course starts in March in the metropolitan Edmonton area and is designed for both acreage holders and potential acreage holders. Topics will include farm law as it affects the small land owner, site selection and development, shelterbelts, ornamental trees and shrubs, turf, vegetables, forage and livestock health, nutrition and shelter.

The course lessons are mailed out each week. After studying them, the student completes the assigned projects and self-check quizes. At the end of the course, he has the option of taking an examination and receiving a certificate.

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Unique Extension Program (cont'd)

Each course will include study groups, hosted by local district agriculturists and agricultural fieldmen. The purpose of these study groups is to adapt the course material to local conditions. Seminars will also be held at two or three locations in the course area to discuss important aspects of the subject being covered. Outside speakers will often be brought in for the seminars.

During the last week of the soils and forage courses, there will be a daily televised review of course material and an illustration of those portions of the course not easily explained in words. Students will be informed of dates and times of these programs.

Because of the lack of complete television coverage in the Peace River region, the weed control course will not be supplemented by a television program. However, there will be wrap-up trade fairs for this and the forage course.

The acreage agriculture course will include a weekly television program which will illustrate many of the topics covered in the course. Students will be informed of the programs in advance.

The above courses will be repeated in subsequent years in other regions. During the next five years it is expected that they will be available in all areas of the province.

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FOR IMMEDIATE RELEASE

PROTECTING WATERLINES FROM FREEZING

Waterlines which were installed last summer are vulnerable to freezing because of the lack of snow so far this year.

Ken Williamson, Alberta Agriculture's engineering technologist at Leduc, advises covering new waterline trenches with straw or soaking them with water. Either procedure will help to keep the frost from penetrating to the pipe. Mr. Williamson says that frost can penetrate as much as 50 per cent deeper in recently disturbed soil compared with compacted soil.

He also recommends burying waterlines a foot deeper than normal if they are being installed now, especially if they are under a roadway or under an area which is subject to snow removal. "Installing waterlines in a frost box, made from pressure-treated wood, will also help to prevent freezing in these potentially troublesome areas," he says.

A newly installed sewage disposal system should also be protected. An 18-inch layer of straw and the frequent flushing of a large volume of hot water into the system will help to keep it from freezing and will also keep the septic tank working satisfactorily.

Anyone requiring further information on protecting newly installed waterlines or sewage systems should contact his agricultural engineering technologist through his district agriculturist.

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FOR IMMEDIATE RELEASE

1975 PREDATION LOSSES IN SHEEP

Predation losses in Alberta's sheep and lamb populations in 1975 were 0.7 per cent and 2.7 per cent respectively.

These figures were obtained from province-wide personal interviews with sheep producers, conducted by Dr. Michael Dorrance and Lawrence Roy of Alberta Agriculture's plant industry laboratory. The information will be used in a study to determine the relationship between predation losses and domestic sheep management practices.

Predation losses were highest in the mixed forest area of northern Alberta where 2.3 per cent of the ewes and 13 per cent of the lambs were lost to predation. The study estimates that predators caused 24 per cent of the all ewe deaths and 35 per cent of the lamb deaths in the area. Approximately 8 per cent of the sheep in Alberta are in the mixed forest area.

In contrast, 1975 predation losses in the remainder of Alberta were among the lowest ever reported in western North America. Predation losses in the parkland, prairie, and foothills of Alberta average only 0.6 per cent for ewes and 1.9 per cent for lambs. Eleven per cent of all ewe deaths and 13 per cent of all lamb deaths were caused by predators.

Coyotes were responsible for 88 per cent of the predation losses. Dogs and other large predators caused the remaining losses.

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FOR IMMEDIATE RELEASE

NUTRITIONAL MANAGEMENT SERVICES

Alberta Agriculture's animal nutritionist, Jerome Martin, urges livestock producers to take advantage of the province's numerous nutritional management services.

He points out that minimizing feed costs, while at the same time ensuring an adequate nutritional level in livestock rations, is of paramount importance to a healthy industry since feed costs account for 65 to 75 per cent of total production costs in most livestock enterprises.

Nutritional management services are available through district agriculturists, regional livestock specialists and animal nutritionists. The latter can be contacted through Alberta Agriculture's pork industry branch and soil and feed testing laboratory in Edmonton. They are qualified to answer specific questions on feeding and management and to evaluate specific feeding programs. Alberta Agriculture also provides feed testing and ration formulation services for livestock producers. Information on these services and feed testing kits can be obtained from district agriculturists.

Feed company representatives, normally university graduates, can also help farmers plan their feeding programs as is the case with private consultants. They will evaluate and suggest feeding and management programs to fit specific situations.

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THE JAPANESE DAIRY INDUSTRY

A Japanese dairy processing plant - one of many local units handling Hokkaido's milk.

Conditions on Japan's Hokkaido dairy farms are so similar to those on a typical Alberta dairy farm that it takes something like the name on a tractor to remind one that one is not in Canada.

This is how C.A. Cheshire, chairman of the Alberta-Hokkaido Dairy Exchange Committee, summed up his impressions of Japanese dairy farms after having visited about a dozen of them and half a dozen milk processing plants on the island of Hokkaido. He found the Japanese industrious and innovative, and as progressive as dairymen anywhere in the world. "There, as here, they use the latest technology to reduce drudgery and to increase productivity," he says. "Their dairy industry is expanding rapidly and their outlook for the future is optimistic."

The number of cows on the dairy farms visited by Mr. Cheshire varied from 30, on those trying to expand and increase their productivity, to several hundred on the larger farms. Many of the cows were producing more than 20,000 pounds of milk each per year. All the cows were Holsteins, and a surprisingly large number had been imported from Canada under the Japanese herd improvement program.

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The degree of mechanization apparently varied from one farm to another, but stanchion barns were more common than other types of housing. There were, however, a few free-stall units and some milking parlours. Although pipeline milkers were prevalent, some dairymen still use the bucket milker.

Mr. Cheshire says "Dairy technology used by the Hokkaido dairymen is very similar to ours in Alberta, and that forage production is the key component." Their pasture and winter feeding practices are very like those used on a typical Alberta dairy farm. According to Mr. Cheshire, Japanese dairymen feed a lot of silage and bale a large proportion of their hay. In fact, he saw large round bales on several Hokkaido dairy farms. The level of supplements, fed with forage to increase milk production, are generally geared to the milking potential of individual animals.

Mr. Cheshire says Hokkaido's dairy industry is growing at a spectacular rate. In one area of the island, for example, the number of dairy cows has increased during the last 20 years to 80,000 from 10,000. He adds, "As one travels through Hokkaido, one cannot help being impressed by the large, modern farmsteads, and the acres of pasture and forage land that have come under cultivation during the past five years."

December 13, 1976

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MUSK OXEN FARM IN ALASKA

Climatewise musk oxen could be successfully raised in Alberta.

This conclusion was reached by Clarence Burpee, acting president of the Canadian (Alberta) Musk Oxen Association, and Judd Bunnage of Alberta Agriculture who visited the Institute for Boreal Research's musk oxen farm at Fairbanks, Alaska, and an Eskimo village on the west coast where some of the animals have been sent.

Mr. Burpee and Mr. Bunnage went to Alaska to see how the Americans are raising their musk oxen and to find out whether it would be possible to obtain breeding stock from the institute's farm for people in Alberta who may wish to raise these animals. The few that are being raised here at the present time were purchased from zoos at very high prices.

The musk oxen farm at Fairbanks is jointly operated by the University of Alaska and the Kelloge Foundation. They intend to distribute the animals to the native villages in the state so that the Eskimos can gather the qiviut (wool) and knit it into clothing for tourists. To make sure that the natives follow this objective, the Kelloge Foundation retains ownership and control of animals sent out to a village.

According to the Eskimos at Unalakleet, the first village to take the animals, these people would raise the musk oxen for meat if they owned them, and they would sell breeding stock. Very few of the women are interested in making clothing out of the qiviut because the prices they receive are too low to compensate for the time involved.

"Our impression after visiting the farm at Fairbanks", says Mr. Bunnage, " is that we could raise musk oxen here every bit as well as the Americans can raise them in Alaska. Their climate is very similar to the parkland belt in

- (cont'd) -

Musk Oxen Farm in Alaska (cont'd)

Alberta". However, the Americans are not keen to export breeding stock because they do not want competition in the production of qiviut. The market for qiviut has remained good as long as qiviut is scarce. Mr. Bunnage says, "Nobody really knows whether the demand for this excellent product is elastic or inelastic".

Mr. Burpee reports that research conducted to date, indicates that musk oxen are suited to domestication, but lack of breeding stock has slowed the growth of such an industry in Alberta. "We need", he says, "an active association to promote political and public opinion which would favor trade with the Eskimos for musk oxen calves."

Mr. Burpee explains that animals on some Arctic island have increased to the point where they are now in danger of mass starvation. "In the hands of farmers, these otherwise doomed animals could be easily tamed and become the breeding stock for a new livestock industry in Alberta", he says. Mr. Burpee also believes the day may not be far off when the Eskimos will be lobbying with governments for the right to sell us musk oxen calves.

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FOR IMMEDIATE RELEASE

SUGGESTED RATIONS FOR BEEF COWS

Is the ration you are feeding your beef cows both adequate and inexpensive?

The following rations, submitted by Jerome Martin, animal nutritionist with Alberta Agriculture's soil and feed testing laboratory in Edmonton, are calculated to supply an adequate level of nutrients for a beef cow weighing 1,050 pounds under average winter conditions. Cows receiving these rations will maintain their weight, but will not gain weight. If a gain in weight is desired, because the animals are in poor condition, Mr. Martin recommends increasing any of the rations by approximately 8 per cent for every 0.5 pounds of gain desired per head per day. Cattlemen whose cows weigh more than 1,050 pounds can also use the rations if they increase the total amount of feed in each ration by approximately 9.5 per cent for each additional 100 pounds of body weight.

Sample Maintenance Rations For A Beef Cow Weighing 1,050 Pounds

	Amount/head/day
1. Good quality grass hay	20 lbs.
2. Good quality alfalfa-grass hay	18.5 lbs.
3. Good quality oat or barley straw (at least 4% protein)	12 lbs.
Barley	5 lbs.
32% protein supplement	1 lb.
4. Good quality oat or barley straw	15 lbs.
Good quality alfalfa hay (at least 13.5% protein)	6 lbs.
5. Good quality oat or barley straw	10 lbs.
Grass-legume hay (10% protein)	10 lbs.
6. Oat or barley silage (65% moisture)	50 lbs.

All the rations must be supplemented with vitamin A and minerals. Initially, the cows should receive 30,000 International Units (I.U.) of vitamin A per head per day. However, during the last four to six weeks of pregnancy, this amount should be increased to between 50,000

- (cont'd) -

Suggested Rations For Beef Cows (cont'd)

and 60,000 I.U. per head per day.

As a general rule, a mineral supplement containing equal parts of calcium and phosphorus (at least 14 per cent of each) should be fed free-choice with a high forage ration.

The above rations are adequate for the first two-thirds of a cow's pregnancy. They should be increased somewhat during the last third of pregnancy and increased considerably after the cow has calved.

Mr. Martin points out that his suggested rations are only a few of many that can be used. Supplements such as dehydrated alfalfa meal, range cubes, liquid protein and other commercial products can also be used to supplement a low quality forage ration.

He also points out that the rations are intended only as guidelines. "The requirements of specific herds and individual animals vary according to breed, body condition, environmental conditions and management systems," he says.

He strongly advises having your home-grown feeds tested at Alberta Agriculture's soil and feed testing laboratory or by a private feed testing laboratory before choosing a combination of feeds and commercial supplements. The soil and feed testing laboratory is located in the O.S. Longman Building, 6909 - 116 Street, Edmonton, T6H 4P2. Once you know the nutritional level of your feeds, your provincial nutritionists, district agriculturist, regional livestock specialist or feed company representative can help you formulate a feeding program.

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FOR IMMEDIATE RELEASE

RECORD YIELDS FOR ALBERTA CROPS

Alberta's average yields for most of this year's major crops were higher than the national averages that were responsible for Canada's record 1976 production.

Fred Boyce of Alberta Agriculture's statistics branch reports that Alberta's average yield for wheat was 32.5 bushels per acre compared with the Canadian average of 31.4 bushels per acre. Alberta's average yield for oats was 58.9 bushels per acre compared with the national average of 52.7. The average yield in Alberta for barley was 44.5 bushels per acre, compared with a Canadian average of 44.1 . Alberta's average yield for rye was 28 bushels per acre compared with the Canadian average of 27.6. Although Alberta's average yield of 19.4 bushels per acre for rapeseed was lower than the national average (20.7), it was still a record for the province.

Record yields of 18.8 tons per acre of sugar beets and over 11 tons per acre of potatoes were also produced in Alberta this year.

According to figures released by Statistics Canada, the 1976 national wheat crop amounted to 864.3 million bushels, representing an increase of nearly 40 per cent over last year's crop and 47 per cent above the last 10-year average. Canada also harvested record barley and grain corn crops of 473.2 and 144.7 million bushels respectively.

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FOR IMMEDIATE RELEASE

COSTS OF TRANSPORTING GRAIN WITH FARM TRUCKS

Alberta Agriculture's production economics branch, in co-operation with the Alberta Wheat Pool, has carried out a study to obtain information on costs incurred by Alberta farmers when transporting their grain in 1974-75 to country elevators and other primary grain collection points (feed mills, seed cleaning plants, etc.)

The study was initiated because farmers and elevator and railway company personnel feel that changes in the grain transportation systems are both desirable and necessary. However, they are concerned about any new system that would involve longer trucking distances, larger farm trucks, higher road maintenance costs and the probable loss of municipal property tax revenues through elevator consolidation and branch line abandonment. In the meantime, rapidly escalating costs in country elevators and rail and terminal elevator systems are pushing grain handling costs continually higher.

Under the joint study, questionnaires were mailed out to a randomly selected group of farmers in the south, central and northern regions of the province. However, since the sample group was relatively small, results obtained are only an indication of farmers' transportation costs, but they are still useful as guidelines for future action. The data obtained by the questionnaires were processed by computer.

In the southern region the survey showed that 44 farm trucks carried 479,159 bushels of grain to country elevators and other sales outlets and provided 6,574,763 bushel-miles of service.

The average total grain transportation costs per farm truck were calculated to be $634.70 for the year 1974-75. Total fixed costs per truck were $279.51 or just over 44 per cent of the total grain transportation costs.

Depreciation was the largest cost component, accounting for nearly 28 per cent of total costs. It was followed by driver labor, responsible for 15 per cent,and other hauling labor responsible for just over 12 per cent.

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Costs of Transporting Grain With Farm Trucks (cont'd)

Other variable costs like repairs, tires, batteries and fuel accounted for over 28 per cent of total transportation costs. Fixed costs, apart from depreciation, were responsible for about 17 per cent.

Calculated unit costs were almost 6 ¢ per bushel, about 0.5¢ per bushel-mile and nearly 59 ¢ per grain-mile (a specific volume of grain, depending upon truck size, travelling one mile).

Data for the central and northern regions of the province are still being processed. Results will be published in the new year.

For further information contact G. Nabi Chaudhary, Production Economics Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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WHAT PRAIRIE PROVINCES?

by Chuck Sterling
Statistics Branch
Alberta Agriculture

Traditionally the three western provinces, Alberta, Saskatchewan and Manitoba, are referred to as the "Prairie Provinces", a term denoting a vast region of flat treeless land seemingly stretching for miles and consisting of one continuous wheat field. The term suggests all agriculture in this vast area is the same with differences of very little significance. Such is not the case. These three provinces are possibly more different from each other than are Quebec and Ontario. Many differences, both economic and political occur, and they are significant enough to suggest that each province be viewed separately and not presented as a conglomerate.

Alberta, for example, leads in the production of beef, barley, tame hay, honey, forage seed, sheep and sugar beets. Saskatchewan is the largest wheat-producing province and leads in the production of oats, rapeseed and rye. Manitoba is noted for its flaxseed, buckwheat, pea and sunflower production.

The main sources of farm income vary from 64 per cent for wheat in Saskatchewan to 32 per cent for cattle and calves in Alberta and slightly less than 32 per cent for wheat in Manitoba. In Alberta farm cash receipts from livestock and livestock products generally equal the amount received from total crops. In Manitoba receipts from crops surpass livestock receipts by one and a half times. In Saskatchewan receipts from crops exceed livestock receipts by four and a half times.

Farm operations also vary between provinces as do methods of farming. Many farmers in Saskatchewan alternate half their total acreage between crop and summerfallow. Approximately 18 million acres, or nearly 40 per cent of the total cropland and summerfallow acreage, are summerfallowed in Saskatchewan. In Alberta summerfallow acreage represents only about 25 per cent of the cropland and summerfallow acreage, while the figure in Manitoba is nearer 20 per cent. Summerfallow is rarely used in Alberta's ranching country.

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What Prairie Provinces? (cont'd)

Soils and climate vary considerably throughout the western provinces and dictate different cropping patterns and farming methods. In fact, considerable variation exists within the provinces themselves. Annual precipitation in Alberta, for example, varies from less than 25 mm (10 inches) in the south to as much as 55 mm (22 inches) in some northern areas.

With the diversity which exists within and between the Western provinces, why does excellent research and analysis, initially done on a province-by-province basis, continue to be published in Prairie summaries? Too often the combination results in averages which are not descriptive of any one province or of the total area. The credibility of the report is destroyed and the results are shelved.

As Canadian agriculture continues to be altered, by economics and political influences, within separate provincial boundaries, the increasing uniqueness of each province's agriculture emphasizes the need for separate provincial agricultural data. Grouping provincial data is to the detriment of the ultimate user.

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ALBERTA LIVESTOCK PROTECTIVE SOCIETY

"Very Satisfactory" is the way Gordon Johnston describes the work being done by the Alberta Livestock Protective Society. Mr. Johnston is a livestock investigator with Alberta Agriculture and a director of the society.

As far as is known Alberta has the only livestock protective society in Canada. It is sponsored by the livestock industry, receives a grant from the provincial government and has been in existance since 1942.

The society has inspectors who enforce those regulations of the Public Service Vehicles Act which pertain to the transportation of livestock. They cover such things as overcrowding, bedding, covering when the temperature is below -18°C., slatting for all types of livestock and the seperation of livestock by sex and size.

The inspectors also check for slippery floors, an excessive amount of manure, poor handling techniques and poor loading and unloading equipment as well as the treatment the animals receive while they are held over at public stockyards, packing plants, auction markets and assembly yards. Anyone who violates any of the regulations involved in the transportation of livestock is warned on the spot and the violation is reported to the appropriate authority.

Last year the inspectors checked 223,780 hogs, 232,911 cattle, 9,075 calves, 11,069 sheep and 1,236 horses being transported in railway cars, trucks and trailers. During this period 148 warnings were issued for such things as overcrowding, lack of partitions, no bedding, faulty equipment etc.

Inspections are carried out on the terminal yards at Calgary, Red Deer, and Edmonton as well as at the auction markets throughout the province.

December 13, 1976

FOR IMMEDIATE RELEASE

TWO CALVES FOR THE PRICE OF ONE

A British cow has contributed to veterinary history by producing a Sussex bull calf and a white Charolais-cross heifer within hours of each other. The Sussex calf had been expected, but the Charolais was not.

The owner of the cow explains the phenomenon, known as superfoetation, by the fact that there was an uncastrated Charolais yearling bull running with the Sussex bulls when the cow was put into the field.

According to the British Ministry of Agriculture, this kind of situation is linked with a low manganese level in the grassland. The low manganese level lowers the progesterone level in the pregnant animal, which sometimes causes another egg to form. It is possible for the eggs to be produced and fertilized on opposite sides of the womb.

Information received by Alberta Agriculture indicates that the cow is producing plenty of milk for both calves, which weighed about 60 pounds each at birth.

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FOR IMMEDIATE RELEASE

CHANGES TO COW-CALF SUPPORT PROGRAM

Agriculture Minister Marvin Moore has announced some changes to the provincial government's cow-calf support program.

Mr. Moore says that although the changes will only affect a limited number of people, the new guidelines will more accurately reflect the government's concern for those who are mostly dependent on the beef cattle industry for their incomes.

Some people, who did not have a cow herd on September 1,1976 through no fault of their own, may qualify. Others who had an unusually high taxable income in 1975 may be eligible under the revised taxable income definition.

The details are as follows:

1. "Taxable Income" will be defined as:

   (1) the amount reported as taxable income for the latest taxation year ending before September 1, 1976 or

   (2) the average of the amounts reported as taxable income for the two taxation years immediately preceding September 1, 1976.

2. Persons who disposed of eligible cows after January 1, 1976, but before September 1, 1976, may be eligible for a support payment where:

   (1) the cows were destroyed by fire

   (2) the herd was contaminated by a disease classed as a named disease in the Animal Diseases Act (i.e. brucellosis) and the eligible cows were destroyed.

   (3) serious health problems of applicant prevented maintenance of the herd.

Persons who have already made application will be notified if any changes in their applications are required.

Mr. Moore says, "Full details will be forwarded to district agriculturists' offices before December 13, 1976."

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AGRI·NEWS

May the loving spirit of Christmas

BE
WITH YOU
NOW
AND BLESS EACH
DAY OF THE NEW YEAR.
MAY ITS
DIVINE RADIANCE BE THE
LIGHT OF YOUR WORLD AND A
SOURCE OF INSPIRATION IN EVERY
THOUGHT, WORD, AND ACTION.
MAY YOU
BE EVER MINDFUL OF GOD'S PRESENCE
EVERYWHERE
AND LET IT FLOW IN AN
UNINTERRUPTED STREAM OF CONSCIOUSNESS
THROUGH EVERY ATOM OF YOUR BEING,
TO GUIDE YOU
IN ALL THINGS AND MAKE CLEAR YOUR WAY.
KNOW
WITH
US
THAT ALL IS WELL.

— Helen Lewis Brenner

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December 20, 1976

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SEASON'S GREETINGS

December 20, 1976

FOR IMMEDIATE RELEASE

CHRISTMAS MESSAGE TO ALBERTA FARMERS

As the festive holiday season is now upon us, I would like to ask all of you in agriculture to pause in your daily endeavours and to reflect for a moment on the many blessings that we as Albertans enjoy.

The past few years have been trying ones for many of the people in this province who are so important to our family farms, and yet, in the true tradition that has made our province strong, they have persevered and succeeded. I am sure that they will continue to do so, firm in the belief, that we strongly share, that agriculture is the most important resource in our economy. I feel confident as we head into the New Year that by continuing to work together, we can overcome many of our difficulties and continue to build a rural life filled with satisfaction and enjoyment.

I am pleased to have this opportunity to extend my sincere wishes that all Albertans will share with their families and friends a joyous holiday season and most prosperous New Year.

Marv Moore

MARVIN E. MOORE,
Minister of Agriculture

December 20, 1976

FOR IMMEDIATE RELEASE

TREES AND HISTORY

Trees can be a living link with the past. Think of the number of times a tree has been used to commemorate an important event in our history.

The evergreen tree has been almost universally accepted as a symbol of Christ bringing light to the world. Records show that as far back as 1521, the evergreen was used in Alsace, now part of Germany, to celebrate Christmas. The custom of decorating Christmas trees spread throughout Germany during the next century and was adopted by Finland about 1800. By 1830 the custom had spread to Norway and Denmark.

The Percy Page tree on the legislative grounds - a link with the past

Christmas trees were first introduced to France from Germany in 1840 and were brought to England by Queen Victoria's German-born husband, Prince Albert, in 1841. In that year he set up a Christmas tree at Windsor Castle. By the middle of the nineteenth century, the Christmas tree had found its way to the United States and Canada. Although the traditions that surround these trees are as varied as the people who make up the North American culture, almost all of them closely associate Christmas with an evergreen tree.

However, the evergreen is not the only tree that has been used to record past events. The cedars of Lebanon are associated with the building of the Temple of Solomon in biblical days, and the broad-leaved conifer, maidenhair or ginkgo, has been used since

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Trees And History (cont'd)

time immemorial in China to commemorate the building of temples.

Almost every community in Canada has trees which were planted on special occasions or to record the visits of distinquished people. A sugar maple and a red oak, for example, planted side by side in the grounds of the governor general's official residence in Ottawa, record the visit of the Queen Mother and the late King George VI in 1939.

Probably one of the best examples of the close association that trees have had, and still have with our heritage, was the use of the maple leaf in Canada's official flag.

Alberta also has its commemorative trees. One of the oldest of these was a Manitoba maple that stood on the site of the present Highways Building in the legislative grounds in Edmonton. It was said to have been planted by a Hudson's Bay Company factor who lived in Fort Edmonton in the nineteenth century. When the Highways Building was built around 1960, the tree, known as the Hardisty maple, was carefully dug up and moved to another location in the grounds. Unfortunately, the upheaval was too much for the old tree. It died shortly after the move. However, it was so revered, even when dead, that its trunk was cut into pieces and distributed as momentos to many Albertans.

Last year the Alberta government sent a shipment of trees to Japan, which was followed this year by a shipment to Korea. Both shipments were sent as symbols of the ties of friendship that have been established between these two countries and the province of Alberta.

Probably the person who has done most to link our history with trees is our former lieutenant governor, the Hon. Grant MacEwan. In 1973 he planted a black

Trees And History (cont'd)

ash on the legislative grounds commemorating the late Hon. Percy Page's term as lieutenant governor of Alberta (1959-1965).

While in office, Dr. MacEwan travelled the length and breadth of the province with trees in the trunk of his car. When a commemorative occasion presented itself, out would come a tree. On one of these occasions, Dr. MacEwan was very worried about his tree's chances of survival. It was fall, and the young tree was long past its time for planting. However, it was planted, and the Roman Catholic priest, in charge of the ceremony, promised to give it tender loving care. A few weeks later, Dr. MacEwan ran into the priest and asked after his tree. "The tree", said the priest, "is flourishing! I sprinkled it with holy water."

On another occasion the tree planting ceremony generated great excitement. The man digging the hole hit a metal object. Everybody present was sure he had struck a rare artifact. However, when the object was finally brought to the surface, it turned out to be a beer bottle of very recent vintage -- part of modern society's garbage!

While in office, Dr. MacEwan founded a unique organization called the Young Alberta Tree Planting Club. Each time he was invited to participate in a school tree planting ceremony, he enrolled as many of the children as he could in his club. The only qualification for membership is that the applicant must promise to plant one tree a year for the rest of his life.

Today the Young Alberta Tree Planting Club boasts 12,000 members, 200 of which were added this year.

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FOR IMMEDIATE RELEASE

BEES' WAX

by Ulf Soehngen
Supervisor of Apiculture
Alberta Agriculture

Bees' wax and honey have been associated with man's religious beliefs since antiquity. In 3500 B.C., for example, the pharoahs of lower Egypt, who are thought to have claimed a direct relationship to the gods, used the likeness of the honeybee as their symbol. Bees' wax was an essential ingredient in the embalming of the "high-born" dead, which the Egyptians and other people practiced, in keeping with their belief that the souls of the departed would find peace only if their bodies remained inviolate.

Later, as tomb pilfering became increasingly common, small, waxen figurines came to be used to represent the dead. Moulded into the image of the deceased, they were hidden, each in its own miniature sarcophagus, in corners and crevices of the tombs, in the hope that they, at least, would not be discovered, and thus remain undisturbed.

In time, bees' wax came to take on magical properties. Moulded into the likeness of a living person, whom they represented, they were used in magical ceremonies to either benefit or harm that person.

This practice is thought to have originated in Egypt, and to have spread from there to Babylonia, India, Greece and Rome. Similar practices also prevailed among the Maya of Central America, who used the wax produced by stingless bees, native to their area. The Maya also burned wax as a sacrifice to the gods and it was used to banish evil spirits from the forest.

The early Christians used candles made of bees' wax in their ceremonies, and if they were well-to-do, to light their homes. The use of wax candles, which originated with the Romans, soon took on a deeper religious meaning.

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Bees' Wax (cont'd)

The honeybee, long considered a model of industry, purity and chastity (before it was discovered that honeybee queens mate with drones), was believed to lead an exemplary life, on which a Christian could pattern his own. Hence, it is not strange that burning bees' wax candles came to symbolize Christ. The wick represented his soul and mortality, while the flame represented the divine person of the Saviour. The candles used by the Catholic church today still consist largely (51 per cent or more) of bees' wax.

Wax produced by the honeybee has also had a profound influence on man's development (material versus spiritual) from a stone age primitive to his present status. The coating on woven baskets and pottery, as a means of waterproofing to make possible the long-term storage of liquids, was very likely one of the first ways in which bees' wax was used.

One of the most significant developments in the history of man, and without which he might not have been able to bridge the gap between the stone and the bronze ages, is the "lost wax" method of casting metal. Briefly, it consists of the following procedure. The object to be duplicated is first moulded, or carved, in wax. A clay shell, with a small opening in one side, is shaped around the wax object. This is hardened in a kiln where the wax escapes through an opening in the mould, which now conforms to the shape of the wax object. Molten metal is later poured into the mold and allowed to cool. The mould is then broken to release the metal likeness of the original wax object.

The "lost wax" method of casting metal was discovered independently in both the old and the new worlds and is still used, with modifications, in modern manufacturing techniques.

The Egyptians also used wax tablets for temporary writing. Occasionally, if he wished to preserve lengthy records, a writer would fasten a number of tablets together at one end, unwittingly giving us the concept of a book, as we know it today. In time, this practice spread to Greece, and from there to the Romans, who gave it to their conquered peoples, along with the other benefits of civilization.

Encaustic painting, a form of art where hot bees' wax, containing the colors, is applied to the surface to be painted, was first developed by the Egyptians. As the use of

Bees' Wax (cont'd)

wax painting spread, different techniques were developed. A method used by the Romans for decorating their homes and public buildings in Herculaneum and Pompeii consisted of mixing the paint with the bees' wax, which was then applied with hot trowels.

Another form of wax painting entailed applying the hot wax, containing the colors with paint brushes. Because of the imperviousness of bees' wax to sea water and the sun's heat, this method was preferred for the painting of ships.

Encaustic painting also found a relatively wide application in Europe during the middle ages. Of the variety of techniques that were developed, some are reported to have yielded paintings of exceptional brilliance and vitality. However, they were cumbersome, at best, and, in time, gave way to others, that were easier to use.

The making of candles was already a highly specialized art in Roman times. Candlemakers followed Roman conquests, spreading the use of the candle, as well as their art, to the people they conquered.

During the middle ages, the popularity of candles grew to such an extent that chandlers' guilds were formed in Europe. Of these some were for tallow candles, while others were for bees' wax candles.

Eventually, wax became such an important item of trade, that it was frequently used as currency. Taxes and tributes were often paid in wax, and legacies and gifts of bees' wax were not uncommon.

To ensure a constant supply of wax, nearly every abbey and monastery came to have its own apiary. Kings, and many lesser nobles, appointed special "beemasters" whose sole duty was to maintain the apiaries of their sponsors. Frequently, such "beemasters" were exempt from military service.

As the price of bees' wax rose with demand, there was a great temptation to adulterate the wax. This practice became so widespread that in 1580, Queen Elizabeth passed an "Acte for the true melting, making and working of Waxe". Those caught adulterating their wax were fined a set amount per pound of wax. Half the fine was paid to the queen, and the

Bees' Wax (cont'd)

other half went to the person who was defrauded. To prevent defrauding, each block of bees' wax had to be marked with the initial of the wax merchant, or with another suitable identifying mark.

Although bees' wax candles are no longer in popular demand, the overall use of bees' wax has greatly increased in all industrialized countries. In fact, in North America, the demand for this product far out strips the supply, and large quantities are imported annually, especially from a number of African countries, which produce wax,rather than honey, for export.

Bees' wax is a product of the wax glands, located in the underside of the worker bees' abdomens. Under certain conditions, the wax glands become active, and wax is extruded in liquid form. It solidifies on contact with the air into small plates, which are used by the bees to construct their combs.

The peculiar mixture of both physical and chemical characteristics of bees' wax makes it suitable for many industrial and non-industrial uses for which, in most cases, substitutes are not available at present.

A large proportion of the bees' wax produced in Canada every year goes into the manufacture of comb foundation (sheets of wax) used to guide the bees in constructing the comb in their hives.

Bees' wax is also used for modelling by sculptors and other artists. Perhaps the best-known among wax sculptors was Marie Tussaud, who started her world-famous wax museum with figures of well-known people in the French revolution, notorious criminals, and others.

The use of bees' wax in industry is so great, that only a brief summary can be attempted here. It includes:

Adhesive; cosmetics, including paints, lipsticks, eyebrow pencils, lotions etc.; crayons and pastels; dentistry; electrical and electronic equipment; foods, including candies and gums; inks for writing and printing; leather making and finishing; lubricants; metallurgy,

Bees' Wax (cont'd)

including metal casting, electroplating, rustproofing and acid etching; paints and varnishes; paper manufacturing, including carbon paper; pharmaceuticals; polishes; textiles and wax modelling.

So next time, you apply make-up, shine your shoes, read your sports illustrated or burn a bees' wax candle, take a second, and think of the insect that helped to make it possible. The one that, since time immemorial, has been "Favoured of the Gods".

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December 20, 1976

FOR IMMEDIATE RELEASE

THE RESPONSIBILITIES OF OWNING A PET

Are you planning to give somebody in your family a pet this Christmas? Are you aware of the responsibility you are taking on when you introduce a kitten or a puppy into your household? And are you prepared to put up with messes, chewed furniture and the cost of giving your pet the proper care?

A pet can bring tremendous rewards to a family in the form of love, affection and loyalty, but, like everything else in life, these pleasures have a price. In essence that price is responsibility.

"The responsibility side of the picture should be looked at very carefully before you decide to buy a pet," advises Dr. H. N. Vance, director of Alberta Agriculture's veterinary services division. "Thousands of pets were destroyed in Edmonton last year because people did not realize what they were taking on when they bought their animal. Do not add to this misery!"

One of the first responsibilities you will assume when you become the owner of a kitten or a puppy will be its health. Did you know that it costs about $14 to have a dog or a cat vaccinated for distemper and that the cost of spaying a female cat or dog ranges from $40 to $60? The cost of having a male cat neutered is around $30. On top of this, you can have expensive veterinary bills because there is no animal health insurance program for pets in this province. A dog license costs $10, and you can feed a dog for between $10 and $20 a month, depending upon its size and the quality of food.

Peggy Palmer, supervisor of the Northern Alberta Society for the Prevention of Cruelty to Animals (SPCA), urges anyone living in an apartment to check with his or her landlord before buying a pet. She says, "So many people make the mistake of buying a pet

-(cont'd)-

The Responsibilities of Owning A Pet (cont'd)

and then asking their landlord if they can keep it. More often than not the little animal is abandoned. If it is lucky it may end up at the SPCA."

Other responsibilities you take on when you buy a dog are those of exercising it regularly and making sure that there is somebody at home to feed and let it out of the house at regular intervals. Mrs. Palmer believes there is no point in having a dog if you keep it chained in the backyard. She points out that all animals need affection and companionship to develop their personalities. A dog, like a person who is denied these fundamental needs, becomes neurotic and often bad tempered as well.

Still another important consideration when contemplating a pet is holidays. You will have to arrange to board your cat or dog or to get somebody to come in when you are away for a weekend or on your annual vacation. The cost of getting a "babysitter" for a cat or dog is around $3 a day. If you have to board them at a kennel, it will cost you between $3 and $5 a day.

If after seriously considering all these responsibilities and expenses you decide you still want a pet, you are obviously the kind of person that will reap the rich rewards that a pet can bring to any home.

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December 20, 1976

FOR IMMEDIATE RELEASE

ARTIFICIAL LIGHTS FOR GROWING PLANTS

Artificial lights for growing plants indoors are an ideal Christmas present for plant lovers.

Poor light is one of the common problems encountered by indoor gardeners, particularly those who live in an apartment with limited window space. Artificial lights can be used in an attic, in an empty cupboard, in the basement, on a bookshelf or in a heated garage.

The light tubes can be fitted into the design of any room and can usually be connected to regular electrical outlets. There are also commercial lighting systems, at varying costs, that consist of a trolley with adjustable shelves for the plants and a reflector. A mirror or a piece of white paper placed under the plants can also be used as a reflector. The purpose of a reflector is to increase the light intensity by reflecting the light back onto the plants.

Individual light tubes and commercial lighting systems for plants can be obtained from garden centres, hardwares stores and many department stores.

According to Arlene Chesney, horticultural specialist with Alberta Agriculture, fluorescent tubes are the most common source of light used by indoor gardeners. There are two types: the household fluorescent tube and the horticultural fluorescent tube. The light from a household fluorescent tube is predominately blue and often has to be supplemented with incandescent bulbs which give off red light. The recommended ratio for a good quality light without excessive heat is two or three fluorescent tubes to one incandescent bulb. Horticultural fluorescents such as Gro-Lux, Plant-Gro and a number of other brands provide a balance of red and blue light suited to plant growth. The latest types give a broad spectrum light which approaches the light spectrum of the sun in the middle of the day.

However, the horticultural fluorescents are more expensive than the household fluorescents and are not always needed. "It seems the only way to find out which is best

- (cont'd) -

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Artificial Lights For Growing Plants (cont'd)

for your plants and for your location is to experiment, " says Miss Chesney. "Although plants require a combination of red and blue light, the amount of either varies with different plants and in different situations. Some people find unsupplemented household fluorescent tubes are as satisfactory as horticultural fluorescent tubes."

Incandescent bulbs can be used by themselves to supplement daylight for foliage plants, but they do not provide enough light to meet the needs of flcwering plants.

Although most plants do best at a distance of 12 inches from the light source, the optimum distance varies with the type of plant. The top leaves of plants which require a high light intensity should be six inches from the light source, while those needing a medium light intensity should be 12 to 18 inches away. Plants which require a low light intensity can be as much as three feet from the light source. Miss Chesney says a light metre can be used to determine the correct placement of plants so that they receive sufficient light. An automatic timer is also useful for switching the lights on and off at the correct times. In a home-constructed lighting system, a pully with a rope or chain can be used for raising the lights as the plants grow.

According to Miss Chesney, the majority of plants thrive with 14 to 18 hours of light per day, but the growing habits of many are directly affected by the length of their day. For example, some plants will not flower unless exposed to 12 or 14 hours of light per day for a specific number of days. These are known as long-day plants and include calceolaris, many garden annuals and begonias. Short-day plants, on the other hand, must have more than 12 hours of complete darkness each night to allow the buds to develop. Kalanchoe, poinsettias and chrysanthemums are examples of short-day plants. Then there is a group of flowering plants that are indifferent to day-length. They include African violets, tomatoes and impatiens.

Artificial Lights For Growing Plants (cont'd)

"Trial and error", Miss Chesney says, "is the only sure way of discovering the best lighting for your plants. Those that do not receive enough light will grow tall and spindley and the foliage will turn pale green. If too much light is the problem, the leaves and flowers will bleach and the leaves will curl under. In fact, over exposure to light may cause the plants to shrivel and turn brown. Too much light also inhibits flowering in species like poinsettias, orchids and chrysanthemums.

Care of plants grown under artificial lights is the same as that required by ordinary house plants. "Your success," says Miss Chesney, "will depend upon the attention you give them." If the air around the plants is too dry, for example, she recommends wetting the moss or stones surrounding the pots and spraying the air around the plants at frequent intervals with an automizer containing tepid water.

The growing media, temperature, humidity and ventilation requirements for plants grown under lights are the same as those recommended for any other house plants. However, watering and fertilizing schedules may have to be stepped up to keep pace with the more rapid growth promoted by the artificial lights.

Most plants should be placed in a moderately lit area after they have flowered. Watering should be reduced and fertilizing discontinued to encourage dormancy. A basement is probably the best place for growing plants under artificial lights because there is usually plenty of room there, and it is easier to keep the temperature between 15° C. and 21° C.

Miss Chesney recommends an American publication entitled "Light Garden" for people who intend to seriously take up indoor gardening under lights. The subscription is $5 per year and the address is Light Garden, 423 Powell Drive, Bay Village, Ohio 44140, U.S.A.

December 20, 1976

FOR IMMEDIATE RELEASE

SUNFLOWER SEEDS FOR CHRISTMAS

Have you thought of using sunflower seeds this Christmas instead of nuts. They are much cheaper than nuts and just as versatile.

They can be done up in pretty packages for children's Christmas stockings or for giving out at childrens parties. They can also be used as a snack with drinks over the holiday season.

Hulled sunflower seeds can be used in any recipe that calls for nuts. They can, for example, be used in turkey stuffing, in any cake recipe that includes nuts, in candies and in cake and ice cream toppings.

There is also a sunflower seed meal which can be mixed with flour. Fluffy and light grey in color, this meal can be used to make up a quarter of the total amount of flour called for in the recipe. If more than this amount is used, it will affect the flavor of the flour.

Sunflower seeds are a valuable source of food because they contain a large proportion of polyunsaturated fatty acids and are a good source of the essential fatty acid, linoleic. All vegetable oils that are high in linoleic acid are very rich in vitamin E.

Although vitamin E has never been shown to be deficient in adults, except under experimental conditions when it was intentionally withheld, there is a theory, based on animal experiments, that suggests aging occurs more rapidly when the intake of vitamin E is low.

Sunflower seeds contain other vitamins and 11 minerals, including calcium. Another point in their favor is that an ounce of hulled sunflower seeds contains only 150 calories!

- (cont'd) -

Sunflower Seeds For Christmas (cont'd)

Here is how Alberta Agriculture's home economics laboratory staff suggest preparing sunflower seeds for eating in the shell.

Soak them overnight in a brine (1/2 cup of salt to 2 quarts of water) to give them a salty flavor. Drain them and add one teaspoonful of cooking oil to each cup of seeds. Roast the seeds in a shallow pan at 350° F. for 30 to 40 minutes, stirring frequently. Watch the seeds carefully and remove them if they start getting too brown. The nut-like part inside the shell burns easily.

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December 20, 1976

FOR IMMEDIATE RELEASE

CHRISTMAS RECIPE SUGGESTIONS

Why not serve barbecued spareribs with a honey sauce for a post-Christmas dinner party? It will be a welcome change from turkey.

Here are the recipes for the spareribs and the honey sauce.

Spareribs

4 lb. spareribs
1 teaspoon salt
1/2 cup chopped onion
2 cloves garlic, crushed
1 cup ketchup
1/2 cup chili sauce

Honey Sauce

2 tablespoons vinegar
1 teaspoon salt
1 tablespoon prepared mustard
1/2 teaspoon pepper
2 tablespoons steak sauce
1 cup honey

Cut spareribs into serving size pieces. Put in a large saucepan. Add 1 teaspoon salt and enough boiling water to cover. Cover and simmer 30 minutes.

Combine all remaining ingredients in a saucepan. Bring to a boil, turn down heat and simmer 10 minutes.

Remove spareribs from water and place in a single layer in a shallow roasting pan. Pour honey mixture over. Bake at 400° F. for 45 minutes.

Serves 6 to 8.

For a fruit salad that is different, try anise fruit salad. Green grapes, red apples and mandarin oranges provide good color, but other fruits can be used.

1/4 cup honey
1/4 teaspoon aniseed
3/4 cup water (or syrup reserved from orange sections)
dash of salt
1/2 lb. seedless grapes
2 bananas, sliced
2 apples, diced
1 can mandarin orange sections (drained)

Combine honey, aniseed, water and salt in saucepan; boil 3 to 4 minutes. Cool. Mix fruits together. Pour syrup over fruit.

6 servings.

If you are planning to make Christmas cookies, why not try honey date nut bars. Cookies, cakes and squares made with honey will stay moist throughout the

- (cont'd) -

Christmas Recipe Suggestions (cont'd)

Christmas season. Here is the honey date nut bar recipe.

3 eggs
1 cup honey
2 teaspoons grated lemon rind
1 cup flour
1 teaspoon baking powder
1/4 teaspoon salt
1 cup chopped dates
1 cup chopped walnuts or pecans
Icing Sugar

Beat eggs until light and foamy. Add honey and lemon rind and mix well.

Mix flour, baking powder and salt. Add to creamed mixture. Mix well. Fold in dates and nuts.

Grease a 13-inch by 9-inch by 2-inch baking pan. Line bottom with waxed paper. Grease again. Spread batter in pan and bake at 325° F. for 40 minutes.

Remove from pan, remove wax paper. Cool on wire rack. Wrap in foil, seal and allow to ripen in a cool place for several days.

Sprinkle with icing sugar. Cut into strips, 2 inches by 1/2 inch. Store in an airtight container.

Makes about 9 dozen.

Sesame squares made with honey are ideal for a tasty and nutritious Christmas snack.

2 cups rolled oats
1/2 cup wheat germ
3/4 cup finely flaked coconut
2 tablespoons shelled sunflower seeds
2 tablespoons sesame seeds
1/4 teaspoon salt
1 tablespoon milk
1/2 cup cooking oil
1/3 cup honey

Combine dry ingredients. Add milk, oil and honey, stirring constantly. Spread on an oiled 9-inch by 13-inch pan. Pat down well. Bake at 300° F. for 20 to 30 minutes. Cool before cutting.

Makes 24 squares.

And for those busy days just before Christmas, how about 'hurry hurry breakfast'! Here is the recipe.

1/2 cup chilled orange juice
1 tablespoon honey
1 egg
1 teaspoon lemon juice

Put all ingredients in blender. Blend well. Serve at once.

Serves one.

Christmas Recipe Suggestions (cont'd)

All the above recipes have been tested and approved at Alberta Agriculture's home economics laboratory in Edmonton.

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December 20, 1976

FOR IMMEDIATE RELEASE

CARE OF A CHRISTMAS TREE

Before shopping for your Christmas tree be sure you know the height you need, advises Herman Oosterhuis, in charge of Alberta Agriculture's tree planting programs. "If you have to cut a large piece off either end of the tree, you will spoil its natural shape," he says.

You should also check the needles of the tree before buying it. Run your finger down a branch to make sure that the needles are not brittle. They should adhere to each branch. Then shake the tree lightly. If only a few needles drop off, the tree is fresh, and, with proper care, should keep its freshness throughout the holiday season.

If you buy your tree several days before you decorate it, make a diagonal cut on the trunk about an inch above the original cut. This opens the pores and helps the tree to absorb water when it is put in a container of water.

Before decorating the tree, square-off the diagonal cut and put the tree back in a container of water. It should remain in water the whole time that it is in the house. You will probably have to refill the container every day, and it is a good idea to sprinkle the branches with water before decorating the tree. This practice also helps to keep the tree fresh.

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Alberta
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FOR IMMEDIATE RELEASE

YULETIDE SHOPPING TIPS
From The Better Business Bureau
Of Edmonton & Northern Alberta

Make certain you deal with a reliable firm. If in doubt check with the B.B.B.

Examine purchases before Christmas to verify size, quality and condition.

Read any contract or sales agreement BEFORE you sign, and keep a copy.

Refuse to buy from the few who use gimmicks. They can't be trusted.

Yuletide charities could be false. GET THE FACTS. Give to the needy not the greedy.

Compare value as well as price. Shoddy merchandise is no bargain.

Have fun shopping but guard money from thieves and pickpockets.

Read guarantees carefully BEFORE buying. They should be in writing.

Include postal code and address parcels clearly and legibly.

Set aside the money you can spend and stay within the limit set.

Transient vendors may not be around after Christmas to handle complaints.

Mail order firms should be checked for reliability.

Allow ample delivery time. Know your store's refund and exchange policy.

Shop early when selections are better, and there is time for careful shopping.

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AGRI-NEWS

NEW YEAR Greetings

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December 27, 1976

FOR IMMEDIATE RELEASE

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December 27, 1976

FOR IMMEDIATE RELEASE

TRANSPORTATION

"Producers, industry and government must now meet to learn the implications of the costs of transporting grain by rail, as outlined by the Snavely Commission, before reacting to railway pressures for increased revenues," Dr. Hugh M. Horner, deputy premier and minister of transportation, said recently.

Dr. Horner cautioned Otto Lang, federal transport minister, against hurriedly providing solutions for the railways without first listening to reactions from western producers.

"The report simply deals with the technical aspects of costing the transporting of grain by rail," he said, "but does not deal with the fundamental issues of upgrading branch lines, and the federal government's inviolable commitment to Western Canadian farmers, which is now expressed in the Crow Rate."

Commissioner Carl Snavely's report indicated that 1974 rail costs for moving grain were 2.58 times the revenue received from the Crow's Nest Pass Freight Rates. However, according to the submission of the three Prairie provinces and the railways, the commission's formula for costing is approximately $100,000,000 less than the railway's formula, and $60,000,000 more than the costing procedures recommended by the provinces.

Dr. Horner said he was pleased the commission recognized the provinces' position that the formula should not include constant costs, and that historical depreciation only be used, rather than the railways' argument for future replacement costs.

On the subject of the rehabilitation of lines -- performing past maintenance which has not been done by the railroads -- Dr. Horner suggested that the federal government should provide the funds required to bring the lines up to the proper standards of efficiency and safety, rather than attempt to do this repair from higher freight rates.

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Alberta

Transportation (cont'd)

Dr. Horner said Alberta is willing to look at alternative ways to help the railways and the federal government meet their obligations to Prairie farmers.

As outlined to the Hall Commission, Dr. Horner said the cornerstones for addressing the issues are:

- Any changes affecting benefits must be legislated so that farmers can plan for the future with assurance.
- Western Canadian farmers' rail transport costs of moving grain and grain products for export must continue at the level of the Crow Rate.
- Any additional funds to the railways must go back into Prairie branch lines.
- Federal Transport Minister, Otto Lang, must solicit the views of producers, Prairie governments, and industry representatives on the necessary elements to develop solutions to cover the gap between the Snavely costs and the Crow Rates. (Alberta recommended that the Hall Commission continue its enquiry to specifically deal with alternate mechanisms for handling the gap between Snavely costs and the existing statuatory rates, or Crow Rates.)

December 27, 1976

FOR IMMEDIATE RELEASE

ALBERTA PROCESSED ALFALFA SITUATION

Current prices for processed alfalfa products in Alberta will probably prevail throughout the winter because of limited supplies in the province, in Western Canada and in the United States.

Don Macyk, marketing economist with Alberta Agriculture, reports that dehydrated alfalfa prices at most Alberta plants have been in the $85 to $95 per ton range since mid-summer. "Sun-cured pellets" he says, "have ranged from $70 to $85 per ton, while sun-cured cubes have been trading between $67 and $71 per ton during most of the present crop year." However, some blended alfalfa cubes have been selling for $4 to $5 less.

Early last spring processed alfalfa export prices, basis ex-spout (when product moved to ship) Vancouver, began on a forward sales basis at $95 per ton for early summer delivery. During the summer export prices for fall and winter deliveries reached about $115 per ton ex-spout Vancouver for good quality dehydrated alfalfa pellets.

During the 1976-77 crop year production of all processed alfalfa in Alberta totalled approximately 115,000 tons with around 10,000 tons, or slightly more, sun-cured alfalfa still to be processed. These figures add up to 10,000 tons more processed alfalfa than were produced during the 1974-75 crop year.

Alberta processed alfalfa exports will total over 60,000 tons by the end of the present crop year, which is nearly double those of the last crop year. However, domestic movement has been a bit slower than it was in the 1975-76 crop year and is expected to reach 50,000 to 60,000 tons by the end of the 1976-77 crop year compared with nearly 80,000 tons during the previous crop year.

According to Mr. Macyk, Alberta has about 30,000 tons of uncommitted processed alfalfa in storage at the present time.

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FOR IMMEDIATE RELEASE

NEW GRAZING RESERVES FOR NORTHERN ALBERTA

Several new grazing reserves are to be established in northern Alberta during the next 12 to 18 months.

According to Dallas Schmidt, associate minister of Alberta Energy and Natural Resources, the lands division of his department, Alberta Agriculture staff and personnel from a number of agricultural organizations are already checking out land in northern areas for assembling into large blocks that can be developed into grazing reserves. Although most of the land that is suitable for grazing reserves is already owned by the province, some may have to be purchased.

When the blocks have been assembled, a plan for developing them into grazing reserves will be prepared by the lands division in consultation with Alberta Environment, Alberta Agriculture, Alberta Recreation, Parks and Wildlife and the Alberta Forestry Service.

Land that is suitable for domestic grazing will be cleared, cultivated, fenced and seeded to forage crops. The rest will be left in its natural state. Grazing reserve development and subsequent grazing will be supervised by personnel employed by the lands division.

Livestock men who use the reserve will be charged an annual grazing fee and will be encouraged to form a grazing association. As members of the association, they will be responsible for advising Alberta Energy and Natural Resources on all aspects of management related to the reserve, including modification of development plans.

At the present time Alberta has 18 fully developed grazing reserves and three that are still in the developmental stage. Mr. Schmidt foresees at least a dozen more reserves by the end of the next decade.

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December 27, 1976

FOR IMMEDIATE RELEASE

LOUSY COWS WANTED

Have you a chronically lousy cow? If she is a Hereford, the chances are you have a sale for her.

Scientists at the federal research station at Lethbridge want as many louse-infested Hereford cows as they can get to determine the effectiveness of some new insecticides. To be of use to the scientists, the cows must be so heavily infested with lice that you can see the eggs and the lice on the hair and the blood from the squashed lice when the animals scratch.

The scientists would prefer to get the cows from herds not any further north than Red Deer because of transportation costs. However, if they are unable to get enough in the southern part of the province, they may be interested in animals in the more northerly areas.

So, if you have a chronically lousy cow --- most herds have one or two hanging around -- here is your chance to get rid of her. A staff member from the research station will come out to your farm and look her over to see if she has enough lice on her for their experiments. If she has, he will negotiate a price with you.

The person to contact on this subject is Marvin Qually, Veterinary Medical Entomology Section, Agriculture Canada Research Station, Lethbridge T1J 4B1 (telephone 327-4561).

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Alberta

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December 27, 1976

FOR IMMEDIATE RELEASE

LIQUID EMBROIDERY NOT HAZARDOUS

Tests conducted on Tri-Chem liquid embroidery paints show that they do not represent a health hazard.

Some time ago a report, released through the government publication "Agri-News", referred to the lead content of some liquid embroidery products. It caused considerable concern on the part of consumers as well as on the part of the manufacturers and distributors of liquid embroidery products.

According to Marilyn Hemsing, clothing and textile specialist with Alberta Agriculture, further tests conducted on Tri-Chem liquid embroidery paints show a considerably lower lead content in the products than was previously reported. In these tests the lead content ranged from 986 parts per million to less than 3 parts per million and appeared to be mainly in the container tube rather than in the paint itself.

Since a tube of liquid embroidery paint contains only about 8 milligrams or less of lead, which is equal to about 0.026 per cent, its lead content is well under the 0.5 per cent allowed under the Hazardous Products Act.

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December 27, 1976

FOR IMMEDIATE RELEASE

ALBERTA PORK SEMINAR

January 10, 1977 is the deadline for registering for the Alberta Pork Seminar which will be held at the Banff Centre in Banff from January 19 to January 21.

Sponsored by the University of Alberta's faculty of extension, the seminar will review major technical and economic developments affecting pork production and examine the implications of these developments. It is intended for commercial hog producers, researchers, agribusiness personnel, extension and education specialists and anyone else concerned with hog production.

The economics of weaner pig production, weaner pig production and supply systems, trends and recent developments in swine manure handling, transportation issues and the new grading system are just a few of the many topics that will be covered in the seminar. A policy panel will deal with such issues affecting the pork industry as transportation, declining hog production and topics raised at the seminar which are of current concern.

Resource personnel will present new information and ideas in each of the main topic areas. They will also lead discussions and participate in the analysis of issues brought up by those attending the seminar.

Groups co-operating in the seminar include the Alberta Hog Producer's Marketing Board, the Western Hog Growers' Association, the University of Alberta's animal science department and Alberta Agriculture.

The registration fee is $75, payable in advance to the University of Alberta.

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Alberta

Phone (403) 427-2127

December 27, 1976

FOR IMMEDIATE RELEASE

RURAL SAFETY ESSAY COMPETITION

"Child Safety at Home and on the Farm" will be the theme of the Alberta Safety Council's 1977 rural essay contest, which closes February 23. This topic was chosen because of the increasing number of injuries to children on farms and in rural areas of the province.

The contest was initiated 26 years ago by a committee of the Alberta Safety Council's board of directors who were assisted by officials from Alberta Education and Alberta Agriculture. Since its inception, well over a million boys and girls in grades 5, 6, 7 and 8 have taken part in the contest. In 1976 more than 47,000 students entered the contest, representing an increase of approximately 7,000 over the previous year.

The contest provides for recognition of winners at the school division level and at the provincial level. Winners from each of the competing grades in each division receive a custom-made lapel pin and the school attended by the winning student receives a certificate mounted on a wooden plaque. These certificates line the halls, or are to be found in trophy cases, in scores of elementary and junior high schools across Alberta.

The essays of all the winners in each grade at the school division level are sent to the Alberta Correspondence School where a competent committee of teachers do the final judging. The writers of the best essay from each of the four grades receive a provincial award, which is presented by the lieutenant governor at an awards luncheon, sponsored by the Alberta Safety Council's Rural Safety Committee. The 1977 awards luncheon will be held on April 29.

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December 27, 1976

FOR IMMEDIATE RELEASE

SUPERVISOR OF FEEDER ASSOCIATIONS APPOINTED

Ken Spiller, head of Alberta Agriculture's regulatory services and feeder associations, had announced the appointment of Herbert Lock to the position of supervisor of feeder associations. His main duty will be to administer the Feeder Association Guarantee Act under which 41 feeder associations are now operating in Alberta.

Mr. Lock comes from Kindersley, Saskatchewan, and is a graduate of the University of Saskatchewan. He obtained his B.Sc. (agriculture), having majored in animal science, in 1968. He spent the following eight years working for the Saskatchewan Wheat Pool as branch manager of the Kindersley Stockyards. As branch manager he was responsible for administering the wheat pool's Feeder Cattle Finance Program.

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December 27, 1976

FOR IMMEDIATE RELEASE

COMING AGRICULTURAL EVENTS

1977

Palliser Wheat Growers Association
Annual Meeting & Convention
Holiday Inn
Saskatoon, Saskatchewan ..... January 4 - 6

Western Agricultural Conference
Westward Motor Inn
Regina, Saskatchewan ..... January 13 & 14

Alberta Fresh Vegetable Marketing Board
Annual Meeting
Westward Inn
Calgary, Alberta ..... January 14

Alberta Pork Seminar
Banff Centre
Banff, Alberta ..... January 19 - 21

Alberta Co-op Seed Cleaning Plants Limited
MacDonald Hotel
Edmonton, Alberta ..... January 20 - 22

Alberta Rapeseed Growers' Association
Westlander Inn
Medicine Hat, Alberta ..... January 20 & 21

Western Stock Growers' Association
Westlander Inn
Medicine Hat, Alberta ..... January 24 - 26

Canadian Farm and Industrial Equipment Show
Coliseum, One Grounds
Toronto, Ontario ..... January 31 - February 4

Canada Farm Show
Toronto, Ontario ..... February 1 - 4

Canadian Charolais Association Annual Convention
Red Oak Inn
Brandon, Manitoba ..... February 3 - 5

Alberta Dairymen's Association Annual Meeting -
Province Wide
Palliser Hotel
Calgary, Alberta ..... February 7 - 9

Canadian Federation of Agriculture
Chateau Laurier
Ottawa, Ontario ..... February 8 - 10

- (cont'd) -

Alberta
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Coming Agricultural Events (cont'd)

Prairie Implement Manufacturers Association
Palliser Hotel
Calgary, Alberta ..... February 9 - 11

Farm and Home Week
University of Saskatchewan
Saskatoon, Saskatchewan ..... January 10 - 14

Canadian Hereford Association Annual Meeting
Auberge des Gouverneurs
Quebec City, P.Q. ..... February 11

Agriculture Institute of Canada, Klinck Lecture
Grande Prairie Regional College
Grande Prairie, Alberta ..... February 16

Western Canadian Society of Horticulture
Hotel not known
Winnipeg, Manitoba. ..... February (third week)

Canadian Limousin Association
Annual Convention
Calgary Inn
Calgary, Alberta ..... February 17 - 19

Alberta Poultry Industry Conference
Mayfield Inn
Edmonton, Alberta ..... February 22 - 24

Provincial Agricultural Service Board Conference
Red Deer Lodge
Red Deer, Alberta ..... February 22 - 24

National Mastitis Council Annual Meeting
Louisville, Kentucky, U.S.A. ..... February 22 & 23

Alberta Commercial Egg Producers Association
Mayfield Inn
Edmonton, Alberta ..... February 23

Alberta Turkey Association
Mayfield Inn
Edmonton, Alberta ..... February 23

Alberta Egg & Fowl Marketing Board
Mayfield Inn
Edmonton, Alberta ..... February 24

Canadian Seed Growers Association, Alberta Branch
Annual Meeting and Shortcourse
Red Deer Lodge
Red Deer, Alberta ..... February 28 - March 1

Calgary Seed Fair
Stampede Grounds
Calgary, Alberta ..... February28 - March 2

- (cont'd) -

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Coming Agricultural Events (cont'd)

Agricultural Policy Issues Conference
Banff Centre
Banff, Alberta . . . . . February 28 - March 4

Salon Internationale de Agriculture
Paris, France . . . . . March

Canadian Horticulture Council
Chateau Laurier
Ottawa, Ontario . . . . . March (first week)

"Ag-Expo" (Annual Seed Fair, Agriculture
Shortcourses & Machinery Displays)
Lethbridge & District Exhibition
Lethbridge, Alberta . . . . . March 2 - 5

Symposium: "The Meat-Grain Interface"
Holiday Inn
Saskatoon, Saskatchewan . . . . . March 2 - 4

Canadian Safety Council Farm and Rural Safety
Advisory Committee
Edmonton, Alberta . . . . . March (third week)

Canadian Agri-Marketing Association
Annual Seminar
Western Ontario . . . . . March 3

United Farmers of Alberta Annual Meeting
Palliser Hotel
Calgary, Alberta . . . . . March 15 - 17

Canadian Western Stock Show and Sale and Rodeo
Edmonton Exhibition Grounds
Edmonton, Alberta . . . . . March 20 - 26

Annual Meeting of Canadian Co-operative Wool Growers
Regina Inn
Regina, Saskatchewan . . . . . March 30 & 31

International Agricultural Plastics Congress 1977
Town & Country Hotel Convention Center
San Diego, California, U.S.A. . . . . April 11 - 16

Fourth Canadian Symposium on Remote Sensing
Quebec City, P.Q. . . . . May 16 - 18

University of Guelph Forage Days
Guelph, Ontario . . . . . June 7 - 9

World Aberdeen Angus Forum
Edinburgh, Scotland . . . . . June 10 - 23

- (cont'd) -

Coming Agricultural Events (cont'd)

1977 Alberta Pork Congress
Exhibition Grounds
Red Deer, Alberta . . . . . June 21 - 23

Highland Show
Edinburgh, Scotland . . . . . June 21 - 24

American Society of Agricultural Engineers
North Carolina State, Raleigh, N.C. U.S.A. . . . . June 26 - 29

International Symposium on Hydrology
Fort Collins, Colorado, U.S.A. . . . . June 27 - 29

International Egg Commission Meeting
Four Seasons Hotel
Calgary, Alberta . . . . . July 3 - 8

National Institute of Farm Safety Inc.
Toronto, Ontario. . . . . July (first week)

Canadian Seed Growers Association Annual Conference
Regina Inn
Regina, Saskatchewan . . . . . July 13 - 15

Third International Farm Management Congress
Hamburg, West Germany. . . . . July 17 - 22

"The North American Lily Society" 30th Annual
International Lily Show
University of Saskatchewan
Saskatoon, Saskatchewan . . . . . July 17 - 19

Alberta Polled Hereford Club-Annual Meeting
Alberta Hereford Centre
Innisfail, Alberta . . . . . August 13

Agricultural Institute of Canada-Canadian Institute of
Food Science and Technology
University of Guelph
Guelph, Ontario . . . . . August 14 - 18

American Society of Agricultural Engineers
Meeting - North Central Region
Ramada Inn
Winnipeg, Manitoba. . . . . September 30 - October 1

Northern Alberta Hereford Club Annual Meeting
Millet, Alberta. . . . . November 5

Royal Agricultural Society of the Commonwealth -
Alberta Tour
Calgary & Edmonton, Alberta. . . . . November 20 - 24

- (cont'd) -

Coming Agricultural Events (cont'd)

Canada Weed Committee (Western Section)
MacDonald Hotel
Edmonton, Alberta . . . . . November 29 - December 1

Alberta Irrigation Projects Association 36th
Annual Meeting
Park Plaza Motor Hotel
Lethbridge, Alberta . . . . . December

The Royal Smithfield Show
Earls Court
London, England. . . . . December

American Society of Agricultural Engineers
Meeting "The Food-Energy Fix"
Palmer House
Chicago, Illinois, U.S.A. . . . . December 13 - 16

1978

Alberta Dairymen's Association Annual Convention
MacDonald Hotel
Edmonton, Alberta . . . . . February 6 - 8

International Soil Science Congress
University of Alberta
Edmonton, Alberta . . . . . June 19 - 27

21st Annual Meeting of the Canadian Institute
of Food Science and Technology
Edmonton Plaza Hotel
Edmonton, Alberta . . . . . June 25 - 28

Alberta Polled Hereford Club Annual Meeting
Innisfail, Alberta . . . . . August 12

The Royal Smithfield Show
Earls Court
London, England. . . . . December

1979

17th Tri-Annual Internation Conference of
Agricultural Economists
Banff Centre
Banff, Alberta . . . . . September 5 - 15

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